MAG Manchester Airport				**Manchester Airport Aerodrome Manual**		Risk Rating	High – Reviewed Annually
Reference	**EGCC-M-AOPS-001**	Issue	**2.1**	Owner	Head of Aerodrome Compliance	Department	Airfield
Issue Date	07/11/25			Compliance Date	01/12/25	Planned Review Date	01/06/26

Manchester Airport

Aerodrome Manual

Table of Contents

Part A – General 4

Section 0 - Administration and control of the aerodrome manual 5

0.1 Introduction 5

0.2 System of amendment and revision 13

Section 1 General Information 15

1.1 Purpose and scope of the Aerodrome Manual 15

1.2 Legal requirements for the issue of an aerodrome certificate as prescribed in Part-ADR.OR 15

1.3 Conditions for use of the aerodrome by its users 16

1.4 Obligations of the aerodrome operator; rights of the CAA and guidance to staff on how to facilitate audits/inspections by the CAA personnel. 17

Part B – Aerodrome Management System, Qualification and Training Requirements 18

Section 2 Aerodrome Organisation and Responsibilities 19

2.1 Management Reporting Structures 19

2.2 Safety Management System Overview 23

2.3 Compliance Monitoring 76

2.4 Quality Management System for aeronautical data and aeronautical information provision 81

2.5 Reporting to UK CAA 81

2.6 Alcohol, psychoactive substances, and medicines. 81

2.7 Other Procedures 82

2.8 Recording of Aircraft Movements and Passenger Numbers 82

2.9 Contracted Activities 82

Section 3 Required aerodrome personnel qualifications. 84

Part C – Particulars of Aerodrome Site 87

Section 4 Aerodrome Description 88

4.1 Distance of the aerodrome from the nearest city, town, or other populus area. 88

4.2 Aerodrome Map 88

4.3 Location of any aerodrome facilities and equipment outside the boundaries of the aerodrome. 91

4.4 Aerodrome Physical Characteristics 92

4.5 Non-Compliances with Certification Specifications 107

4.6 Types of Permitted Aerodrome Operations 112

Part D – Particulars of the Aerodrome required to be reported to the Aeronautical Information Service 114
Section 5 Aeronautical Information Service 115
5.1 Name and Address of Aerodrome 115
5.2 Insert Location of Aerodrome 115
5.3 Geographical Coordinates of the Aerodrome Reference Point 115
5.4 Aerodrome Elevation and GEOID Undulation 115
5.5 Elevation of Thresholds and Runway Ends 115
5.6 Aerodrome Reference Temperature 115
5.7 The Aerodrome Beacon 116
5.8 Name of the Aerodrome Operator and Contact Details 116
Section 6 Aerodrome Dimensions 116
6.1 Runways 116
6.2 Length, Width, Surface Types, and protected areas 117
6.3 Visual Aids for Approach 118
6.4 NAVAIDS 120
6.5 Location and Designation of Standard Taxi Routes 120
6.6 Geographical Coordinates 121
6.7 Obstacles Infringing Standard Protected Surfaces 126
6.8 Pavement Surface Type & Bearing Strength Using Aircraft Classification Number 126
6.9 Pre-Flight Altimeter Check Locations Established and their Elevation. 126
6.10 Runway and Runway Intersection Declared Distances 126
6.11 Contact Details of Aerodrome Coordinator for Removal of Disabled Aircraft 126
6.12 Rescue and Firefighting 126
Part E – Aerodrome Operating Policies and Procedures 133
Section 7 Aerodrome Operational Policies 134
Section 8 List of ASIs 146

Part A – General

Section 0 - Administration and control of the aerodrome manual

0.1 Introduction

0.1.1 Signed Statement by the Accountable Manager that the aerodrome manual complies with all applicable requirements, and with the terms of the certificate.

The Manchester Airport Aerodrome Manual clearly and concisely describes the systematic approach to the operation of the aerodrome, demonstrating our commitment to managing the aerodrome safely and effectively.

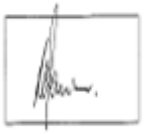
Contained within this manual are technical and operational requirements, operational management, and maintenance details together with management system documentation.

This document complies with the requirements of Article 211 of the Air Navigation Order 2009 and Assimilated Regulation (UK) 139/2014.

The Aerodrome Manual is distributed to all internal departments and third parties that have a role in the safe operation of the aerodrome.

Whilst accountability starts at the top of any organisation it is essential that all individuals understand their own responsibilities and accountabilities as defined within this manual.

Radford David Taylor



Manchester Airport Accountable Manager

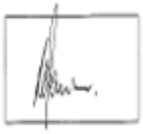
1st November 2025

0.1.2 Signed statement by the accountable manager that the aerodrome manual contains operational instructions that are to be complied with by the relevant personnel.

The Manchester Airport Aerodrome Manual contains the operational instructions which must be always observed by persons operating on the aerodrome.

These procedures are compiled in compliance with the relevant ICAO and CAA regulations. The operational procedures are contained in Part E and the associated Airside Operational Instructions (AOI's). The process for distributing the Aerodrome Manual is detailed in Part A, Section 0.4

Radford David Taylor



Manchester Airport Accountable Manager

1st November 2025

0.1.3 Manual Format

The Aerodrome Manual is arranged in five parts. These are as follows:

Part A – General.
Part B – Aerodrome Management, Qualification and Training Requirements.
Part C – Particulars of the Aerodrome Site.
Part D – Particulars of the Aerodrome required to be reported to the Aeronautical Information Services.
Part E – Operational Procedures, Equipment and Safety Measures.

0.1.4 Explanations, abbreviations, and definitions of terms

0.1.4: a) Abbreviations

A to B

AAIB	Air Accident Investigation Branch	AOC	Airline Operators Committee
ACL	Airport Coordination Ltd	AOM	Airfield Operations Manager
ACN	Aircraft Classification Number	AOP	Airfield Operations Procedure
ADF	Automatic Direction Finder	AOR	Airfield Occurrence Report
AODM	Airfield Operations Duty Manager	APPS	Approach Surface
AFS	Airport Fire Service	ASA	Aerodrome Safety Alert
AGL	Aeronautical Ground Lighting	ASB	Aviation Safety Board
AIS	Aeronautical Information Service	ASDA	Accelerate Stop Distance Available
ALARP	As Low As Reasonably Practicable	ASI	Airside Standing Instruction
ALSC	Aerodrome & Landside Safety & Compliance Team	ASCO	Airfield Safety & Compliance Officer
ALSCM	Aerodrome & Landside Safety & Compliance Manager	AST	Asset Support Team
AMC	Acceptable Means of Compliance	ASU	Airfield Safety Unit
ANO	Air Navigation Order	ATC	Air Traffic Control
AOA	Airport Operators Association	ATCO	Air Traffic Control Officer
ATS	Air Traffic Service	ATSA	Air Traffic Services Assistant
ATZ	Air Traffic Zone		

C to H

CAA	Civil Aviation Authority	FOD	Foreign Object Debris
CAP	Civil Aviation Publication	GA	General Aviation
CCO	Chief Commercial Officer	GHSL	Ground Handling Service License
CDA	Continuous Descent Approach	GM	Guidance Material
CEO	Chief Executive Officer	GMC	Ground Movement Control
CP	Critical Part	GMP	Greater Manchester Police
CS	Conical Surface	GSRB	Group Safety Resilience Board
CTR	Control Zone (ATC)	HAO	Head of Airfield Operations
DME	Distance Measuring Equipment	HAZOP	Hazard and Operations Analysis
DRA	Development Risk Assessment	HOR	Head of Resilience
DRDF	Digital Read out Direction Finder	HR	Human Resources
EASA	European Aviation Safety Agency	HSE	Health and Safety Executive
EBDM	Engineering & Baggage Duty Manager	H24	24 hours a day, every day
EMT	External Maintenance Team	HN	Hours of Darkness
ESTL	External Shift Team Leader		
ETB	Engine Test Bay		

I to O

ICAO	International Civil Aviation Organisation	MANTIS	MA Noise Tracking Information System
IFR	Instrument Flight Rules	MASHCO	MA Storage and Handling Company (Fuel)
IHS	Inner Horizontal Surface	MOTNE	Meteorological Observation Telecommunications Network Europe
IHP	Intermediate holding position	MT	Motor Transport

ILS	Instrument Landing System	NATS	National Air Traffic Services Ltd
IMC	Incident Management Centre	NNI	Noise and Number Index
IN	Information Notice	NOTAM	Notice to Air Missions
IRVR	Instrumented Runway Visual Range	NWAS	Northwest Ambulance Service
KSPI	Key Safety Performance Indicator	OAN	Operational Advice Notice
LDA	Landing Distance Available	OFZ	Obstacle Free Zone
LOP	Local Operating Procedure	OHS	Outer Horizontal Surface
LPA	Local Planning Authority	ORA	Operational Risk Assessment
LSA	Localiser Sensitive Area		
LVP	Low Visibility Procedure		
MA	Manchester Airport		
MAG	Manchester Airport Group		
MAG CD	MA Group Capital Delivery		
MA RFFS	MA Rescue & Fire Fighting Service		

P to T

PAPI	Precision Approach Path Indicator	SI	Supplementary Instruction
PCN	Pavement Classification Number	SID	Standard Instrument Departure
PCV	Passenger Carrying Vehicle	SIP	Safety Improvement Plan
PHI	Preliminary Hazard Identification	SMM	Safety Management Manual
PNdB	Perceived Noise Decibels	SMR	Surface Movement Radar
PPE	Personal Protective Equipment	SMS	Safety Management System
PPR	Prior Permission Required	SNOWTAM	Snow State Message
PSM	Passenger Services Manager	SRA	System Risk Assessment

PSZ	Public Safety Zone	SRB	Safety Resilience Board
RAP	Runway Access Point	SSC	Safety Severity Categorisation
RESA	Runway End Safety Zone	SSR	Secondary Surveillance Radar
RFFS	Rescue and Fire Fighting Services	STAR	Standard Arrival Route
RIV	Rapid Intervention Vehicle	TAP	Taxiway Access Point
PRE	Respiratory Protective Equipment	TDZ	Touch Down Zone
RTF	Radio Telephony	TOCS	Take-off Climb Surface
RVP	Rendezvous Point	TODA	Take-off Distance Available
RVR	Runway Visual Range	TS	Transitional Surface
SARG	Safety & Airspace Regulation Group		

U to Z

UK AIP	UK Aeronautical Information Publication	WIP	Work in Progress
ULD	Unit Load Device	WM	Watch Manager (ATC
VCR	Visual Control Room		
VFR	Visual Flight Rules		
VOR	VHF Omni Directional Radio Range		

0.1.4: b) Definitions

Aerodrome	A defined area (including any buildings, installations, and equipment) on land or water or on a fixed offshore or floating structure intended to be used either wholly or in part for the arrival, departure, and surface movement of aircraft.
Aerodrome beacon	An aeronautical beacon used to indicate the location of an aerodrome from the air.
Aerodrome elevation	The elevation of the highest point of the landing area.
Aerodrome operator	Any legal or natural person, operating or proposing to operate one or more aerodromes.
Aeronautical ground light	Any light specially provided as an aid to air navigation, other than a light displayed on an aircraft

Autonomous runway incursion warning system (ARIWS)	a system which provides autonomous detection of a potential incursion or of the occupancy of an active runway and a direct warning to a flight crew or a vehicle operator.
Aircraft classification number (ACN)	the number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category.
Aircraft stand	a designated area on an apron intended to be used for parking an aircraft
Apron	a defined area intended to accommodate aircraft for purposes of loading or unloading passengers, mail, or cargo, fuelling, parking, or maintenance.
Apron service road	a road located on or adjacent to an apron, intended for the exclusive use of vehicles.
Apron taxiway	a portion of a taxiway system located on an apron and intended to provide a through taxi-route across the apron.
Certification specifications	technical standards adopted by the Agency indicating means to show compliance with UK Reg (EU) 139/2014 and its Implementing Rules and which can be used by an organisation for the purpose of certification.
Clearway	a defined rectangular area on the ground or water under the control of the appropriate entity, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.
Critical Area	an area of defined dimensions extending about the ground equipment of a precision instrument approach within which the presence of vehicles or aircraft will cause unacceptable disturbance of the guidance signals.
Datum	any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities (ISO 19104).
Declared distances	Take-off run available (TORA)' means the length of runway declared available and suitable for the ground run of an aeroplane taking off. Take-off distance available (TODA)' means the length of the take-off run available plus the length of the clearway if provided. Accelerate-stop distance available (ASDA)' means the length of the take-off run available plus the length of the stop-way if provided. Landing distance available (LDA)' means the length of runway which is declared available and suitable for the ground run of an aeroplane landing.
De-icing/anti-icing pad	an area comprising an inner area for the parking of an aeroplane to receive de-icing/anti-icing treatment and an outer area for the manoeuvring of two or more mobile de-icing/anti-icing equipment.
Displaced threshold	a threshold not located at the extremity of a runway.
Foreign object debris (FOD)	an inanimate object within the movement area which has no operational or aeronautical function, and which has the potential to be a hazard to aircraft operations.
Frangibility	the ability of an object to retain its structural integrity and stiffness up to a specified maximum load but when subject to a load greater than specified or struck by an aircraft will break, distort, or yield in a manner designed to present minimum hazard to an aircraft.
Frangible object	an object of low mass designed to break, distort, or yield on impact so as to present the minimum hazard to aircraft.
Graded area	that part of the runway strip cleared of all obstacles, except for specified items and graded, intended to reduce the risk of damage to an aircraft running off the runway.

Hot spot	a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.
Instrument runway	one of the following types of runways intended for the operation of aircraft using instrument approach procedures: 1. 'Non-precision approach runway': an instrument runway served by visual aids and a non-visual aid providing at least directional guidance adequate for a straight-in approach. 2. 'Precision approach runway, Category I': an instrument runway served by non-visual aids and visual aids, intended for operations with a decision height (DH) not lower than 60 m (200 ft) and either a visibility not less than 800 m or a runway visual range (RVR) not less than 550 m. 3. 'Precision approach runway, Category II': an instrument runway served by non-visual aids and visual aids intended for operations with a decision height (DH) lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range (RVR) not less than 300 m. 4. 'Precision approach runway, Category III': an instrument runway served by non-visual aids and visual aids to and along the surface of the runway and: A — intended for operations with a decision height (DH) lower than 30 m (100 ft), or no decision height and a runway visual range (RVR) not less than 175 m; or B — intended for operations with a decision height (DH) lower than 15 m (50 ft), or no decision height and a runway visual range (RVR) less than 175 m but not less than 50 m; or C — intended for operations with no decision height (DH) and no runway visual range (RVR) limitations.
Intermediate holding position (IHP)	a designated position intended for traffic control at which taxiing aircraft and vehicles should stop and hold until further cleared to proceed when so instructed by the appropriate air traffic control unit.
Manoeuvring area	that part of an aerodrome to be used for the take-off, landing, and taxiing of aircraft, excluding aprons.
Movement area	the part of an aerodrome to be used for the take-off, landing, and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).
Obstacle	all fixed (whether temporary or permanent) and mobile objects, or parts thereof, that: — are located on an area intended for the surface movement of aircraft; or — extend above a defined surface intended to protect aircraft in flight; or — stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.
Obstacle-free zone (OFZ)	the airspace above the inner approach surface, inner transitional surfaces, and balked landing surface and that portion of the strip bounded by these surfaces, which is not penetrated by any fixed obstacle other than a low-mass and frangible mounted one required for air navigation purposes.
Obstacle limitation surface	a surface that defines the limits to which objects may project into the airspace.
Obstacle protection surface	a surface established for visual approach slope indicator system above which objects or extensions of existing objects shall not be permitted except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.

Paved runway	a runway with a hard surface that is made up of engineered and manufactured materials bound together so it is durable and either flexible or rigid.
Pavement classification number (PCN)	a number expressing the bearing strength of a pavement for unrestricted operations.
Rapid exit taxiway	a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimising runway occupancy times
Runway	a defined rectangular area on a land aerodrome prepared for aircraft landing and taking-off
Runway end safety area (RESA)	an area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
Runway guard lights	a light system intended to caution pilots or vehicle drivers that they are about to enter an active runway.
Runway-holding position	a designated position intended to protect a runway, an obstacle limitation surface, or an ILS/MLS critical/sensitive area at which taxiing aircraft and vehicles should stop and hold, unless otherwise authorised by the aerodrome control tower.
Runway strip	a defined area including the runway and stop-way, if provided, intended: — to reduce the risk of damage to aircraft running off a runway; and — to protect aircraft flying over it during take-off or landing operations.
Runway turn pad	a defined area on a land aerodrome adjacent to a runway for the purpose of completing a 180-degree turn on a runway.
Runway visual range (RVR)	the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.
Sensitive area	an area extending beyond the Critical Area where the parking and/or movement of aircraft or vehicles will affect the guidance signal to the extent that it may be rendered unacceptable to aircraft using the signal.
Taxiway	a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including: — Aircraft stand taxi lane. — Apron taxiway. — Rapid exit taxiway.
Threshold	the beginning of the portion of the runway usable for landing.
Touchdown zone	the portion of a runway, beyond the threshold, where landing aeroplanes are intended to first contact the runway.
Visual aids	indicators and signalling devices, markings, lights, signs and markers or combinations thereof.

0.1.5 Bibliography

- UK Reg 139/2014
- CAP 232 Aerodrome Survey Information
- CAP 382 Mandatory Occurrence Reporting Scheme
- CAP 393 Regulations made under powers in the Civil Aviation Act 1982 and the Air Navigation Order 2016
- CAP 413 Radiotelephony Manual
- CAP 493 Manual of Air Traffic Services Part 1
- CAP 637 Visual Aids Handbook
- CAP 642 Airside Safety Management
- CAP 670 Air Traffic Services Safety Requirements
- CAP 683 The Assessment of Runway Surface Friction for Maintenance Purposes
- CAP 699 Standards for the Competence of RFFS Personnel
- CAP 700 Operational Safety Competencies
- CAP 726 Guidance for Developing and Auditing a Formal Safety Management System
- CAP 738 Safeguarding of Aerodromes
- CAP 760 Guidance on the Conduct of Hazard Identification, Risk Assessment, and the Production of Safety Cases: For Aerodrome Operators and Air Traffic Service Providers
- CAP 772 Wildlife Hazard Management at Aerodromes
- CAP 781 Runway Rehabilitation
- CAP 790 Requirement for an Airside Driving Permit (ADP) Scheme
- CAP 791 Procedures for changes to aerodrome infrastructure
- CAP 795 Safety Management Systems
- ICAO Annex 14 Volume 1 Aerodrome Design & Operations
- ICAO 9157 Aerodrome Design Manual (Parts 1-5)
- ICAO 9870 Manual on the Prevention of Runway Incursions
- ICAO 9859 Safety Management Manual
- ICAO 9774 Manual on the Certification of Aerodromes
- ICAO Airport Services Manual Part 7 Airport Emergency Planning
- ICAO Annex 13 Aircraft Accident & Incident Investigation
- Manchester Airport Emergency Response Manual
- Manchester Airport Fire and Rescue Service Orders
- Manchester Airport Engineering Procedures Manual

0.2 System of amendment and revision

0.2.1 Authorised Personnel for the Issue and Insertion of the Amendments and Revisions

The Aerodrome Manual is owned by the Head of Aerodrome Compliance and is the authorised person for the issuance and insertion of amendments and revisions.

0.2.2 Amendment and Revision Records

0.2.2: a) Publication Date

The Aerodrome Manual will be published annually in June, to become effective on July 1st of that year and will be valid for Calendar 12 months.

Any delay in publication will be notified by the issue of an Information Notice.

0.2.3 Handwritten Amendments

Handwritten amendments and revisions to the manual are not permitted.

0.2.4 Document Identity/Version Control

0.2.4: a) Issue, Compliance and Review Date

Each official version of the Aerodrome Manual and associated documents will contain a document control header, which as a minimum will contain an Issue Date, Compliance Date and Review Date. The definitions of which are.

- Issue Date: The date of which the document is approved for release/publication.
- Compliance Date: The date in which the aerodrome community need to start complying with the document and its contents.
- Review Date: The next date the document is due for review.

E.g. Document Control Header

MAG Manchester Airport						Risk Rating	
Reference		Issue	1.0	Owner		Department	
Issue Date				Compliance Date		Planned Review Date	

0.2.4: b) Annotation of Pages, Paragraphs, and effective dates

- Document identity and version control is to be included in the within the footer of each page.
- Documents shall be controlled according to the version number.
- The next revision of the manual will be identified by a change in the version number (e.g. EGCC-M-AOPS-001 Version 1.0, followed by EGCC-M-AOPS-001 Version 2.0 etc.)
- Should a minor interim revision be issued, then this would be identified by the current version number and an increase in the digit to the right of the decimal (e.g. EGCC-M-AOPS-001 Version 1.1, EGCC-M-AOPS-001 Version 1.2 etc.)
- Draft Versions will be identified by the version number and the statement DRAFT next to the document reference number. E.g. EGCC-M-AOPS-001DRAFT
- All pages of the manual are effective from the date of issue; a list of amendments and revisions made to the previously issued version can be found in section 0.2.5

0.2.5 A list of effective pages or paragraphs

Date of Amendment	Part	Section	Page(s)

0.2.6 Annotation of changes

Changes made to text, diagrams or paragraphs within the Manual will be identified by the addition of a black vertical line, at the appropriate place, on the right-hand margin of the page.

The relevant text will also be highlighted in **bold text** to readily identify the amended detail pertaining to that update.

Where a completely new section has been added, only the title will be highlighted in bold and the addition of a black vertical line, at the appropriate place, on the right-hand margin of the page.

0.2.7 Temporary revisions

When in the interest of safety, a situation occurs requiring an immediate amendment or revision to the Aerodrome Manual, a Supplementary Instruction will be issued.

When, in the interest of safety, a situation occurs requiring an immediate amendment or revision to the Airside Operational Instruction (AOI), the revised AOI will be reissued, notified by a SI.

0.2.8 Document Distribution & Distribution List

A Safety Communication, in the form of an Information Notice, will be promulgated to advise when the new Aerodrome Manual and associated documents are published.

The manual is provided in electronic format only. It may be printed but companies should be aware that any hard copies are uncontrolled and may not be the most up to date version. It is the responsibility of the manual holder to ensure that any hard copies are up to date.

The manual is also viewable online, where it may be downloaded as a PDF file: https://www.manchesterairport.co.uk/aviation-professionals/aerodrome-manual

It is the responsibility of the individual departments and third-party companies to advise the Airport of any changes to the distribution lists for Safety Communications. Notifications of changes to contact details should be sent to airfieldoperations@manairport.co.uk

Section 1 General Information

1.1 Purpose and scope of the Aerodrome Manual

The Aerodrome Manual contains details of the characteristics, policies, operational procedures for the safe operation of Manchester Airport in accordance with the Air Navigation Order and the Aerodrome Certificate.

The procedures contained within this manual must be complied with by all users of the airport.

1.2 Legal requirements for the issue of an aerodrome certificate as prescribed in Part-ADR.OR

Manchester Airport is certificated by the UK Civil Aviation Authority under Assimilated Regulation (UK) 139/2014. The certificate number is EGCC-001, and the issue date is 2nd March 2015. Under the terms of this certificate the aerodrome certificate holder may not contravene

or cause or permit to be contravened any aerodrome certificate condition at any time in relation to the flights specified in the Air Navigation Order 2016 (ANO).

As the Certificate Holder, Manchester Airport is required to take all reasonable steps to secure that the aerodrome and the airspace within which its visual traffic pattern is normally contained are always safe for use by aircraft.

Manchester Airport is also required to have an Aerodrome Manual which contains all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties as such including information and instructions relating to the matters specified in the ANO. The Aerodrome Manual complies with all obligations as placed on Manchester Airport by UK Reg (EU) 139/2014.

1.2.1 Name and Address of Aerodrome

Manchester Airport
Olympic House
Manchester Airport
Manchester
M90 1QX

1.2.2 Name and Address of Certificate Holder

Manchester Airport PLC
Olympic House
Manchester Airport
Manchester
M90 1QX

1.2.3 Certification Requirement

The Air Navigation Order requires that certain flights, in particular Public Transport Flights and Flying Training take place at a Certificated Aerodrome.

The Aerodrome Certificate, issued by UK CAA under UK Reg (EU) 139/2014, provides for Public Transport use of the Aerodrome.

1.3 Conditions for use of the aerodrome by its users

The terms and conditions for using the airport are set up in the booklet 'Schedule of Charges and terms and Conditions of Use' updated annually and available via the webpage http://www.manchesterairport.co.uk/about-us/publications/fees-and-charges/

1.3.1 Certification Requirement

The Air Navigation Order requires that certain flights, in particular Public Transport Flights and Flying Training take place at a Certificated Aerodrome.

The Aerodrome Certificate, issued by UK CAA under UK Reg (EU) 139/2014, provides for Public Transport use of the Aerodrome.

1.3.2 Certification Compliance

The Director or Aerodrome Operations is responsible for ensuring that Manchester Airport complies with the conditions of the Aerodrome Certificate.

1.3.3 Use of the Airport

Subject to the conditions of the certificate nothing shall be taken to confer on any person the right to use the Aerodrome without the consent of the certificate holder.

The Director of Aerodrome Operations shall inform the Authority of the times during which the Aerodrome is to be generally available for the take-off and landing of aircraft, and of any changes in those times.

1.3.4 Types of Operations Permitted

Instrument and Visual flying operations of the following types:

- Air Transport passenger and cargo
- Training flights for normal air transport operations
- Positioning flights
- Commercial helicopter flights
- General aviation flights
- The largest aircraft type certified to use the airport is Code F

1.4 Obligations of the aerodrome operator; rights of the CAA and guidance to staff on how to facilitate audits/inspections by the CAA personnel.

For determining compliance with the relevant requirements of UK Reg (EU) 139/2014 Manchester Airport will grant access to any person authorised by the CAA

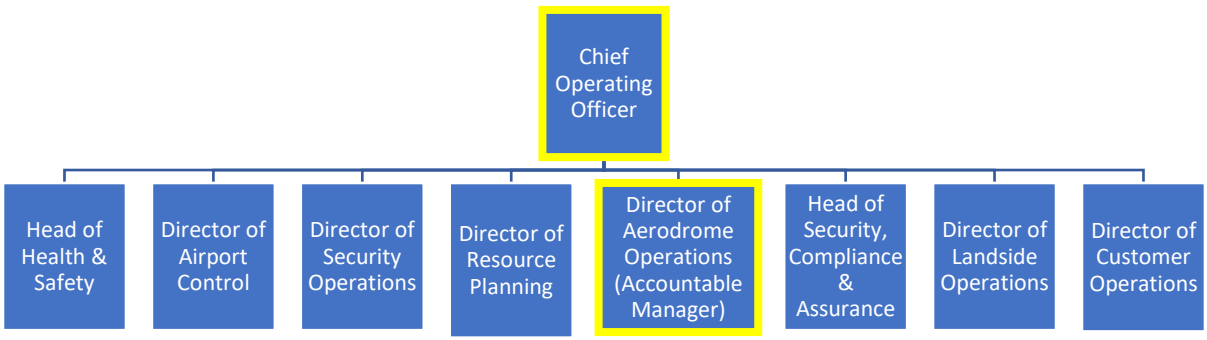
Part B – Aerodrome Management System, Qualification and Training Requirements

Section 2 Aerodrome Organisation and Responsibilities

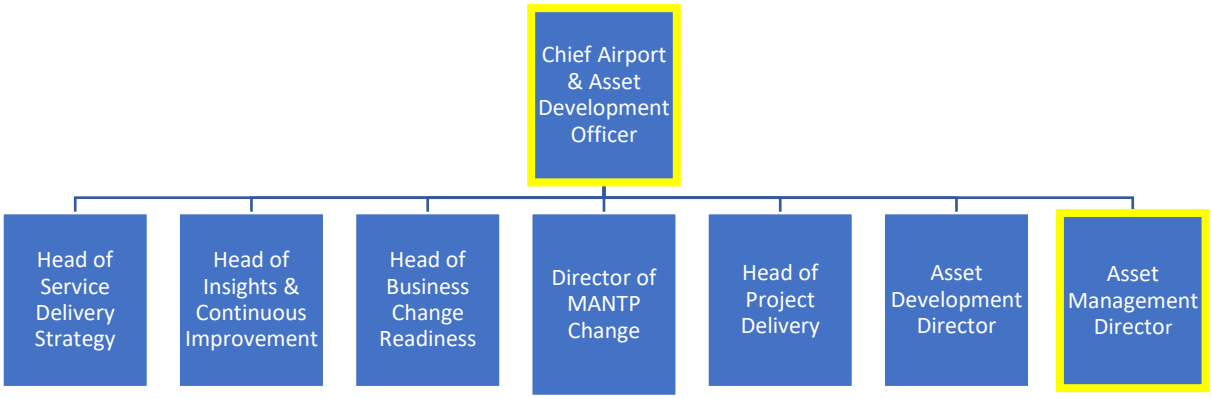
2.1 Management Reporting Structures

2.1.1: a) Manchester Airport Leadership Team

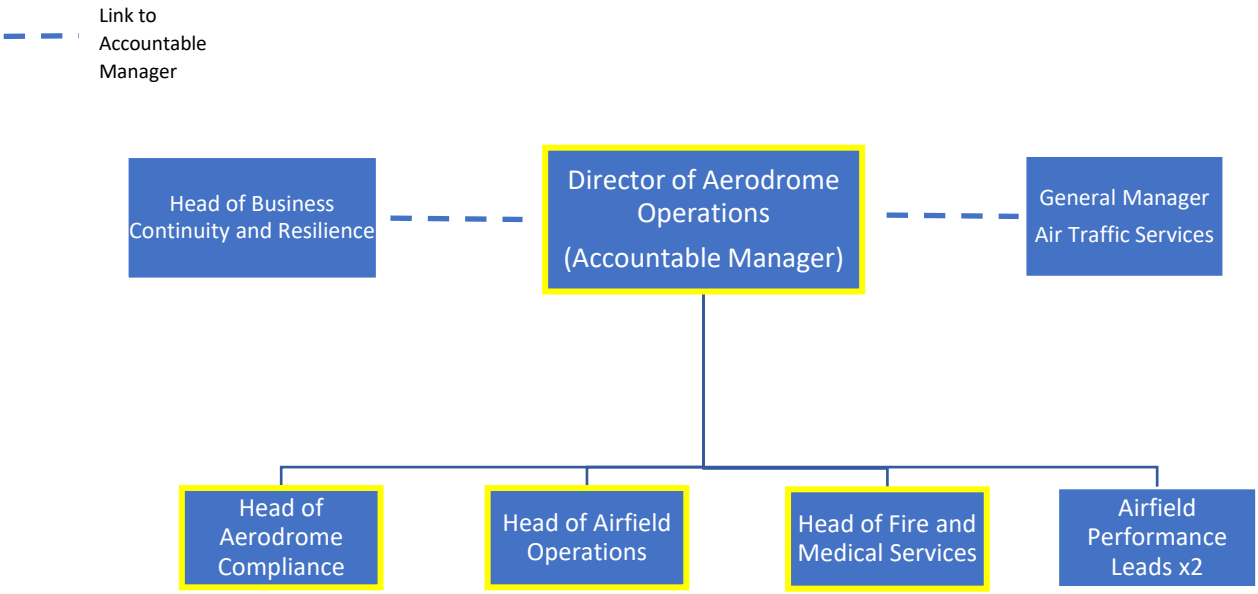
2.1.1: b) Manchester Airport Operations Senior Leadership Structure



2.1.1: c) Manchester Airport and Asset Development Structure

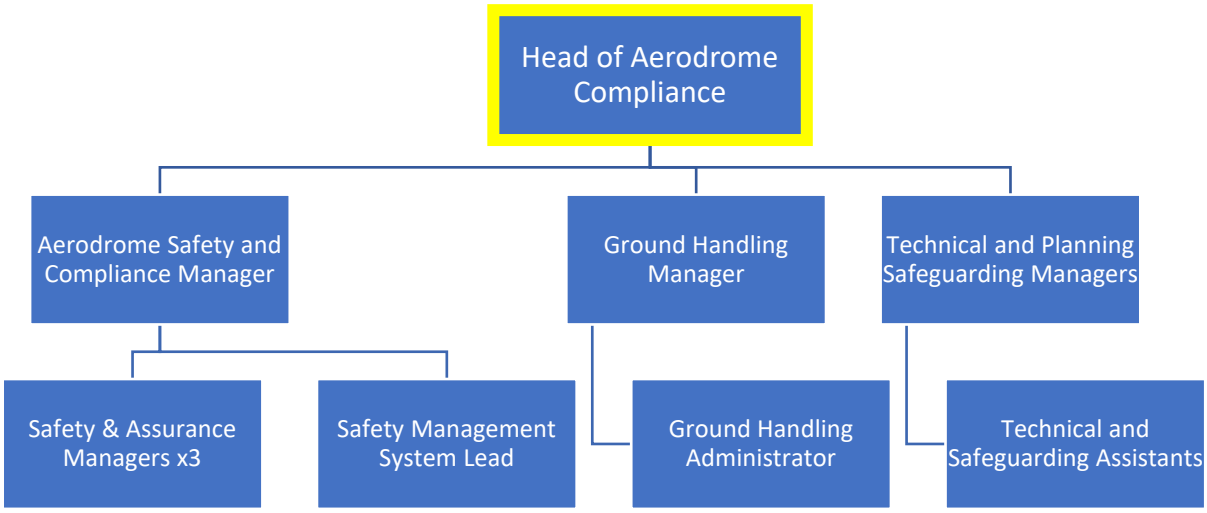


2.1.1: d) Manchester Airport Aerodrome Structure

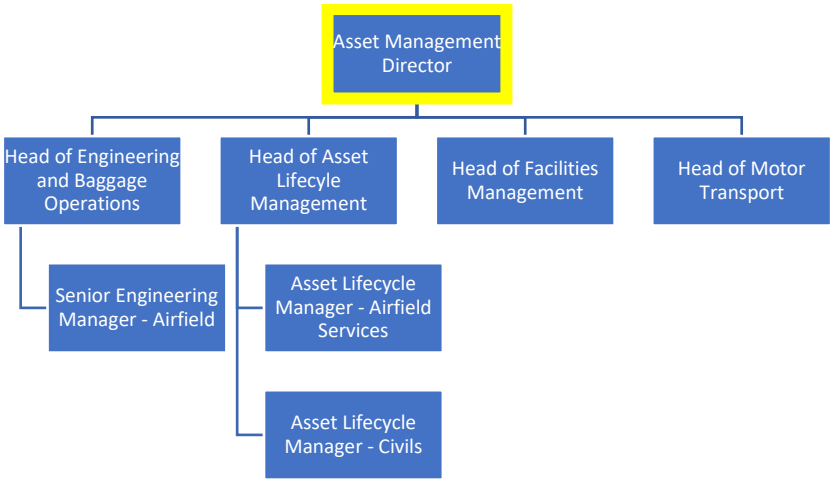


2.1.1: e) Airfield Operations

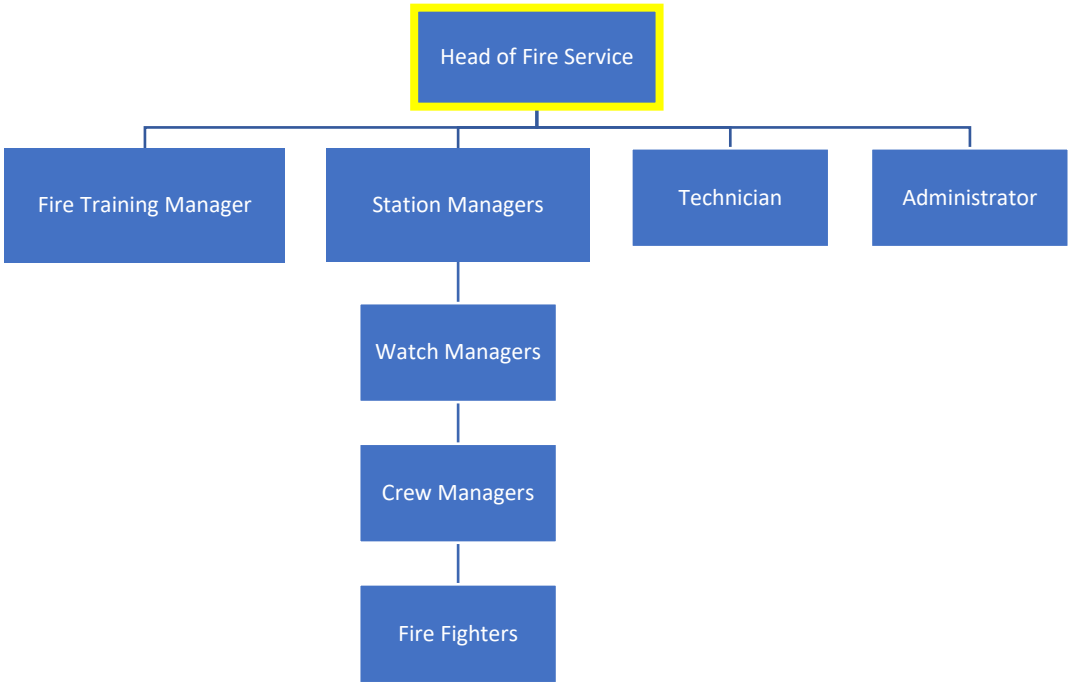
2.1.1: f) Aerodrome Safety & Compliance



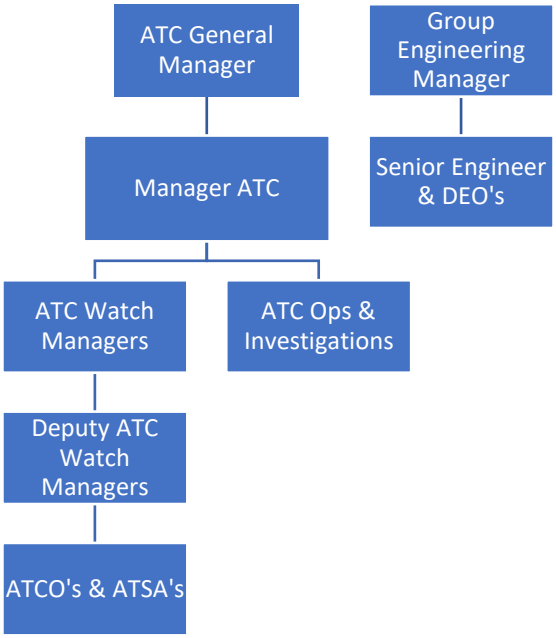
2.1.1: g) Asset Maintenance Structure



2.1.1: h) Fire & Medical Services



2.1.1: i) NATS (ANSP)



2.2 Safety Management System Overview

2.2.1: a) Scope & Principles

The Aerodrome Safety Management System has been established to provide an efficient management structure and systematic approach to the safe operation of the Aerodrome .

The SMS is written in compliance with required legislation, including ICAO Annex 14 Volume 1, ICAO 9859, UK Reg (EU) 139/2014 Implementing Rules / Organisation Requirements – Aerodrome Operators and Air Navigation Order.

The scope of the Safety Management System:

a) Provides details on the Aerodrome's approach to safety.

b) Documents the Aerodrome safety policy, objectives, procedures, and individual safety accountabilities.

c) Outlines the organisational safety management structure at the Aerodrome .

d) Provides details of safety related committees.

e) Describes the safety risk management process.

f) Describes the safety performance monitoring and measurement process.

g) Details safety promotion methodology.

h) Provides a cross index of Regulatory and Aerodrome safety related documentation.

i) Provides details of emergency response planning.

2.2.1: b) Safety management is achieved through the implementation of the following principles:

Objective :

To prevent aircraft from being damaged and people being harmed.

Policy:

An effective Safety Policy will be implemented to ensure that the highest standards of safety are always maintained. This is contained within the Manchester Airport's Airside Safety Policy.

Organising:

An effective management structure within the company will be put in place to ensure that the Safety Policy is achieved. The Policy ensures clear lines of accountability so that it is apparent to all where safety responsibilities lie. Interaction and communication between all airside operators regarding safety is essential, as is close liaison between the Aerodrome and the Civil Aviation Authority.

Planning:

A planned and systematic approach to implementing the Safety Policy will be achieved through an effective safety management system. The planning process will identify the safety priorities and objectives together with training, equipment, and other resource requirements. The Aerodrome requires all companies operating airside to follow industry best practice and have written safe working and operating procedures.

Measuring performance:

Performance will be measured against agreed standards to assess when and where improvement is needed. Safety committees discuss and address all matters relating to airside safety so that safe, efficient operations can be maintained and enhanced.

Auditing and reviewing performance:

Safety audits are one of the principal methods for fulfilling the safety performance monitoring functions. Safety audits are performed internally and externally by the Civil Aviation Authority.

2.2.2 Manchester Airport Airfield Safety Policy & Objectives

2.2.2: a) Policy

Airside Safety Policy

MAG believes that nobody should be harmed by our business. We call this Vision Zero.

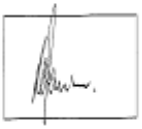
Aviation operations can be hazardous. Risks must be managed and safety will be embedded in our business thinking.

The Manchester Accountable Manager and members of senior management will lead and set the standards for a safe airside and airspace operation to achieve our safety performance objectives and targets.

These are our Principles. We will:

1. Operate and continually develop an effective Airside Operations Safety Management System to provide a systematic foundation for safety in airside and airspace activities.
2. Ensure that airside safety is suitably prioritised when considered relative to commercial, operational, environmental and social conflicts.
3. Comply with legislative and regulatory requirements and standards.
4. Clearly define for all our colleagues their responsibilities for the delivery of airside safety performance.
5. Ensure that all our colleagues are provided with adequate and appropriate training, are competent in safety matters, and are only allocated tasks commensurate with their skills.
6. Ensure that sufficient resources are available to implement our safety policies and activities.
7. Demonstrate and provide leadership across third parties and contracted activities to minimise the risks associated with airside and airspace operations.
8. Operate a safety risk management process to ensure that Operations safety risks are reduced to be As Low as Reasonably Practicable (ALARP).
9. Ensure that externally supplied systems and services that impact upon the safety of our operations meet appropriate safety standards.
10. Audit, record, and review our safety performance against realistic objectives and/or targets, take appropriate action when required, and establish continuing improvement.
11. Ensure that appropriate safety information is provided to all airfield users and colleagues, and that people are aware of risks and relevant safety control measures.
12. Promote a 'Just' safety culture which creates an environment that allows colleagues to report all incidents and safety concerns without the threat of censure, disciplinary action or subsequent loss of employment, except when there is gross negligence, or a deliberate or wilful disregard to our standard operating practices and procedures.

Radford David Taylor



Manchester Airport Accountable Manager

1st November 2025

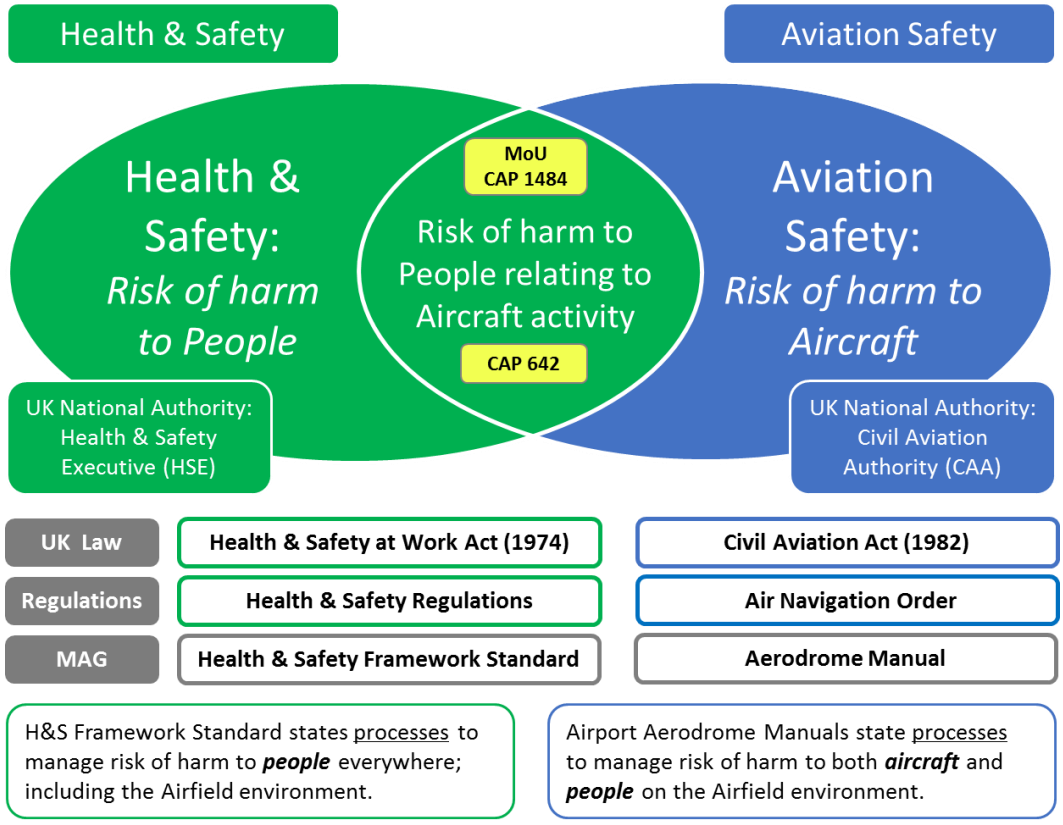
2.2.2: b) Co-ordination between other regulatory bodies

The Airfield is also a work environment that is subject to the provisions of regulations set by the UK Health and Safety Executive (HSE).

The diagram below illustrates the relationships between the two regulatory environments and indicates areas where the two can overlap.

The HSE and the CAA recognise the potential for either or both authorities to take an interest in safety oversight or enforcement and operate under a Memorandum of Understanding for collaborative working.

The CAA document CAP1484 sets out guidance on how the interfaces are coordinated between the two regulatory authorities. Principally, CAA document CAP642, Airside Safety Management, is the product of contributions from the CAA and HSE, in addition to industry participation and contains a significant focus on the health and safety of workers and passengers on the Airfield.



The potential for overlap between the Manchester Airport Safety Management Systems mirrors that above and both Aviation Safety and Health and Safety teams recognise the need for collaboration and cooperation where risks include harm to people, or incidents involve harm to people on the Airfield. Participation from the relevant subject matter experts is involved across activities on the Airfield.

2.2.3 Safety Accountabilities & Responsibilities

2.2.3: a) Safety Accountabilities

The following pages detail the safety responsibilities of the roles detailed in paragraphs 2.1 and are not intended to be a complete overview. Further information can be found in individual job descriptions and CAP700.

i Managing Director

Reporting to Manchester Airports Group (MAG), the Managing Director, Manchester Airport (MD) has overall responsibility for passengers, visitors, and employees at the Airport. The incumbent has overall responsibility for the safety strategy, consultation, facilitation and monitoring role for the Airport's business partners, suppliers and service providers.

Key Aerodrome Safety Responsibilities

- Ensure that the relevant safety significant issues are brought to the attention of the Executive Committee.
- Ensure the Airport's operation is sufficiently resourced to meet the requirements of maintaining the Aerodrome Certificate.
- Promote and endorse a just culture throughout the whole organisation which creates an environment that allows employees to report all incidents and safety concerns.
- Ensure that full consideration is given to maintain safety in changes to the Airport's organisational structure, business processes and physical infrastructure.
- Ensure that all key post holders are aware of their safety responsibilities.

ii Chief Operating Officer

Accountable to the Managing Director of Manchester Airport.

Key Aerodrome Safety Responsibilities

- Taking a leadership role in MAN's Operational Departments' safety programme and ensuring the provision of systems which ensure that safety never becomes a subordinate to financial matters.
- Championing safety at MAN.
- Supporting all MANs departments and functions to monitor safety performance across MAN.
- Ensuring that the operational departments implement the MAN Safety Culture Programme.
- Appointing safety conscious direct reports (and functional direct reports), monitoring their performance and ensuring that safety is given the highest priority within their training and development plans.
- Ensuring the annual business plans for the operational functions are sufficiently resourced to achieve compliance with the safety policy and management system.

- Supporting the Managing Director to ensure that full consideration is given to the safety integrity of changes in the airport organisational structures and business processes.
- Ensuring that the airport process improvement work has safety as an integral and priority element.
- Ensuring that there is liaison with those who have operational functional responsibilities which might affect safety at Manchester.

iii Chief Airport & Asset Development Officer

The Chief Airport & Asset Development Officer is accountable to the Director of Aerodrome Operations.

Key Aerodrome Safety Responsibilities

- Ensures that people processes and systems are continuously reviewed and updated to support regulatory and service KPIs are continuously met or exceeded.
- Plan all major asset works and co-ordinate with key operational activities and/or services in an efficient and timely manner to support both secure and efficient airport operations.
- Oversee and co-ordinate the development of asset investment plans.
- Ensure that the defined asset management risk register is effective and maintained up to date.
- Ensure that suitable qualified and competent persons are employed in asset critical roles.
- Ensure that all departmental key postholders are aware of their safety responsibilities.
- Responsible for developing short, medium and long term investment plans for Aerodrome assets.
- Ensuring adequate resourcing for delivery of maintenance plan for Aerodrome assets.

iv Director of Aerodrome Operations

The Director of Aerodrome Operations is the nominated Accountable Manager for Manchester Airport and therefore is accountable for all safety related issues. They are accountable to the Chief Operating Officer.

Key Aerodrome Safety Responsibilities

- The Accountable Manager for the Aerodrome as defined in UK Regulation 139/20214 AMC 1 ADR.OR.D.015(a) Personnel Requirements.
- Ensure the Airports operation is sufficiently resourced to meet the requirements of maintaining the Aerodrome Certificate.
- Set high level safety targets and objectives, for achievement to be monitored through attendance at safety boards.

- Implement and monitor safety targets and objectives to drive safety improvement and the reduction in identified top risks where possible.
- Ensure that suitable, qualified and competent persons are employed in operational and safety critical roles, as defined in the Aerodrome Manual.
- Ensure that the defined top risks and risk profile is effective and maintained up to date.
- Ensure that a strategy is in place to undertake investigations into safety significant incidents/accidents.
- Ensure that all key postholders are aware of their safety responsibilities.
- Has the authority to provide a competent ANSP provision including personnel, ATC systems and equipment.
- Responsible for change management including authorising and inhibiting change to preserve safety.
- Delegates responsibilities to NATS and General Manager ATC, for operational delivery of ATC at the Aerodrome.

v Asset Maintenance Director

The Asset Maintenance Director is accountable to the Chief Airport and Asset Development Manager.

Key Aerodrome Safety Responsibilities

- Oversee and co-ordinate the overall planning and control of regular and ad-hoc quality assurance reviews and investigations in major and key operational areas to ensure quality standards are maintained.
- Ensure that airfield pavements for use by aircraft are maintained free of FOD and in good structural order to cause no hazard to aircraft.
- Ensure the provision of a service dedicated to the safe containment of and clean-up of all types of spillages.
- Provide adequate resource to respond to an emergency as dictated by the Manchester Airport Emergency Response Plan and to service the Inclement Weather Plan.
- Ensure that repairs to paved and landscaped surfaces are undertake to a safe standard.
- Ensure that airfield grasslands and other soft ground areas are maintained in a condition to deter wildlife activity as described in CAP 722, and as requested by the Head of Airfield Operations.
- Ensure that regular assessments of runway friction are undertaken in accordance with CAP 683, local operating procedures (LOPs) and Airfield Standing Instructions (ASIs).
- Ensure that electrical power supplies are maintained with the required supplementary back-up systems to provide an uninterrupted supply to essential AGL and navigational aids during Low Visibility Operations.

- Ensure that suitably skilled manpower is always available to rectify faults or configure AGL and power supplies as required by the AODM or ATC.
- Ensure that systems are in place to inform the AODM immediately of any degradation in the characteristics of runway friction, pavement condition or AGL.
- Ensure crash and fire alerting systems are in place and functioning, in accordance with the requirements of the Manchester Airport Emergency Response Plan.
- Ensure that a system is in place to brief staff on the content of Operational Advice Notices (OANs) and other operational notices, with special regard to any specific duties and actions.
- Ensure that the aerodrome ground markings are applied and maintained to the requirements of the UK Regulation 139/2014 CS.ADR.DSN.L.
- Ensuring that adequate aircraft recovery procedures are in place to oversee and undertake aircraft recovery should the need arise.
- Ensure maintenance and compliance of AGL systems in accordance with certification requirements.
- Ensuring the provision and maintenance of a drainage management system in accordance with the certification requirements.
- Ensure compliance with MAG Habitat Maintenance Plan and conduct habitat maintenance in accordance with the plan.
- Ensure adequate resources are available to the Head of Motor Transport to enable the safe management of the MAG fleet in accordance with UK CAA Requirements.

vi Head of Aerodrome Compliance

The Head of Aerodrome Compliance is accountable to the Director of Aerodrome Operations.

Key Aerodrome Safety Responsibilities

- Ensure that airfield safety and compliance requirements are considered and met during the planning process for all airside development projects, and maintenance works through an effective change management system.
- Ensure details of all work in progress are promulgated in accordance with the Manchester Airport Operational Advice Notices (OANs).
- Ensure that Aerodrome Safeguarding assessments are undertaken in accordance with CAP738, and that appropriate safety consultations take place.
- Ensure the Manchester Airport Aerodrome Manual is reviewed and updated as required.
- Ensure that aeronautical information is promulgated in a timely and accurate manner through the UK AIP and associated publications.
- Ensure that up to date survey information is available in accordance with CAP232 and that continued review and development take place.
- Ensure compliance with conditions of the Manchester Airport Aerodrome Certificate or that special conditions are formally documented with UK Regulation 139/2014.

- Set objectives to ensure performance/safety targets and standards are achieved by Airside Operations.
- Monitor safety performance and set strategic improvement activities through chairing of committees, and escalate trends to the Manchester Airport Health, Safety and Environment Board as appropriate.
- Maintain a safety reporting process for airfield safety significant events, including Mandatory Occurrence Reports (MORs), to regulatory authorities and notification of serious incidents to the CAA and Air Accidents Investigations Branch (AAIB).
- Ensuring that the safety risks associated with Aerodrome Operations have been identified, assessed and where necessary, satisfactorily reduced or mitigated.
- Acting as a focal point for the development, administration and maintenance of the SMS, including the interface with other stakeholders SMS.
- Undertaking appropriate audits of the SMS as directed by the Accountable Manager.
- Monitoring the effectiveness of corrective actions.
- Maintaining all internal and external safety documentation in a safety library.
- Provide periodic reports on safety performance.
- Attending safety meetings and other relevant external safety committees as agreed with the Accountable Manager.
- Liaising with other aviation organisations, and the regulatory authorities to collate and disseminate safety information.
- Fostering and developing industry best practice, developing and delivering training courses and presentations on safety management.
- Ensure that Manchester Airport adopts a formal change management process during periods of personnel, system, equipment and procedural changes.
- Ensure that accidents and significant incidents are investigated thoroughly, in accordance with company procedures.
- Ensure the continuous improvement and development of the SMS applicable to activities in Airside Operations.
- Compliance and monitoring of runway friction carried out in accordance with CAP 683, local operating procedures (LOPs) and Airfield Standing Instructions (ASIs).
- Providing risk management and audit assurance.

vii Head of Airfield Operations

The Head of Airfield Operations is accountable to the Director of Aerodrome Operations.

Key Aerodrome Safety Responsibilities

- Promote a positive safety culture through liaison with airport stakeholders.

- Ensure that accidents and significant incidents are investigated thoroughly in accordance with company procedures.
- Develop systems, procedures and policies which support and improve the delivery of airfield operations, winter operations, low visibility operations and baggage hall operations.
- Maintain a robust wildlife risk management programme and systematic methods to monitor control, including assessment of hazards within a 13km radius of the airport, and review annually for effectiveness.
- Ensure the airfield is inspected, maintained and developed in accordance with UK Regulation 139/2014.
- Ensure and effective emergency response and operational recovery system is in place for aircraft emergencies, airfield incidents and disruption.
- Ensure systems are in place that facilitate the safe allocation of aircraft to apron parking stands.
- Ensure stand allocation safety parameters are in place and are adhered to.
- Ensure that there is an appropriate and effective Adverse Weather Plan and the relevant people are aware of their responsibilities.
- Ensure that the Low Visibility Procedures (LVP) are specific to Manchester Airport and that all relevant persons involved in the LVPs receive information, updates and training when required.
- During times of works in progress (WIP), ensure that the correct planning and co-ordination with appropriate departments is completed and that all information is promulgated.

viii Head of Fire & Rescue Services

The Head of Fire Services is accountable to the Director of Aerodrome Operations.

Key Aerodrome Safety Responsibilities

- Review the RFFS elements of the Manchester Airport Emergency Response Plan, ensuring they are up to date and support regular testing of the Plan by resourcing exercises.
- Ensure that all employees are aware of their safety accountabilities with regards to the MAN Emergency Response Plan.
- To provide a Rescue and Fire Fighting Service (RFFS) that meets the outputs of the RFFS Task and Resource Analysis (TRA).
- Ensure that the airports rescue and firefighting capability meets the declared category within UK AIP, always ensuring accuracy of category promulgation.
- Ensure that Local Operating Procedures (LOPs) are in place within the Fire Service Procedure Manual and are kept up to date.
- Ensure that all fire fighters are trained in accordance with CAA requirements, local operating procedures, and they maintain competency.
- Provide and maintain in a safe condition, training rigs, equipment and apparatus for fire service requirements for realistic fire training, in line with established safety protocols and to the required UK CAA Regulations.
- Ensure that operational risk assessments for fire and emergency planning activities are kept up to date and reviewed in accordance with company procedures.

- Ensure that emergency response to aircraft accidents and significant incidents are investigated thoroughly, in accordance with company procedures and recommendations implemented through the MAN Emergency Response Plan.
- Maintain working relationships with local authorities.
- Ensure the delivery of domestic emergency responses in line with regulations, including the response of on-site paramedics.

ix Airfield Operations Manager

The Airfield Operations Manager is accountable to the Head of Airfield Operations.

Key Aerodrome Safety Responsibilities

- Manage resources to provide airside safety services including, aircraft marshalling, aircraft/vehicle escorts, enforce apron/vehicle safety in accordance with CAP642 and MA policies.
- Ensure that a thorough system of airfield inspections is carried out, recorded and followed up.
- Ensure that all employees are aware of their safety accountabilities.
- Ensure that operation risk assessments for Airfield Operations are kept up to date and reviewed in accordance with company procedures.
- Ensure that wildlife hazard management duties are completed on the airfield by airfield operations.
- Ensure that Local Operating Procedures (LOPs) for Airfield Operations Centre are in place.
- Ensure that all operational staff are trained and competent to carry out duties within the LOPs.
- Ensure that a system for reporting of safety significant occurrences is in place, including MOR and reportable accidents.
- Ensure that an effective emergency response is provided by Airfield Operations in accordance with the Manchester Airport Emergency Response Plan.
- Ensure systems are in place to facilitate safe operations during periods of airside works or maintenance in accordance with CAA requirements and the Manchester Airport Aerodrome Manual.
- Attend and contribute to formal safety related committees as described in the Manchester Airport Aerodrome Manual.

x Airfield Operations Duty Manager

The Airfield Operations Duty Managers (AODMs) are accountable to the Head of Airfield Operations

Key Aerodrome Safety Responsibilities

- The AODM is the senior aerodrome operational authority outside of normal working hours, where the Director of Aerodrome Operations or their deputy is absent.
- Undertaking of dynamic risk assessments for unplanned changes of degradation of aerodrome status.
- Ensuring a safe operating environment including safe operations of aerodrome facilities including AGL.
- Ensuring timely promulgation of the aerodrome status.

2.2.3: b) Key Safety Post Holders

Accountable Manager	Rad Taylor, Director of Aerodrome Operations
Safety Manager	Gary Renault, Head of Aerodrome Compliance

2.2.3: c) Key Aerodrome Post Holders

* Yellow outlined boxes indicate Key Aerodrome Safety Responsibilities contained within the aerodrome manual.

Position	Current Post Holder	Position authorised to deputise in event of absence
Managing Director	Chris Woodroofe	Chief Operating Officer
Chief Operating Officer	Pete Lederer	Aerodrome Operations Director
Chief Airport & Asset Development Officer	Ian Costigan	Director of Aerodrome Operations
Director of Aerodrome Operations	Rad Taylor	Head of Aerodrome Compliance
Head of Aerodrome Compliance	Gary Renault	Aerodrome Safety and Compliance Manager
Head of Fire Service	Brian Massie	Station Manager
Head of Airfield Operations	Melanie Lawley	Airfield Operations Manager
Airfield Operations Manager	Rob Salzano	Airfield Operations Duty Manager
Asset Management Director	Stephen Johnson	Head of Engineering and Baggage Operations
Head of Engineering and Baggage Operations	Kneal Foy	Senior Engineer
Head of Asset Lifecycle Engineering	Andy Sheridan	Reliability Engineer
Head of Facilities Management	Paul Lupton	Facilities Manager (Hard Services)
Head of Motor Transport	Kevin Hainey	Workshop Manager
Asset Lifecycle Manager	Paul Cooling	Head of Asset Lifecycle Engineering
General Manager ATC (NATS)	Daryl Heaselgrave	Manager Operations & Training (NATS)

2.2.3: d) Competency

All relevant issues relating to competency are described in the Airfield Operations Maintenance of Competency Policy. This document is held and controlled by the Head of Airfield Operations.

The MA Operations Safety Competency Framework outlines areas of expertise required to run a safe and regulated aerodrome, the people that are charged with such responsibilities, and training needs to ensure areas where improvement/maintenance of competency is required. This framework is based on CAP700.

Airfield Operations, Asset Management & MA RFFS both have competency frameworks in place that cover the duties of technical colleagues who are required to know specific procedures and carry them out in specific ways. For MA RFFS, such requirements are required to retain role competence.

2.2.3: e) Fitness for Duty

All colleagues employed by Manchester Airport are expected to adhere to the HR policies that form part of the standard Terms & Conditions of employment.

Such policies can be found on MAGNET Policy Hub in the following section: Human Resources/Policy.

2.2.3: f) Deputising for Absence

When colleagues with key safety responsibilities are absent from work, it is essential that a competent colleague assumes their safety responsibilities. In general, the following applies: Any person assuming the responsibilities of another must be deemed competent in terms of technical/operational knowledge to do so.

A senior manager who, out of necessity, is required to authorise action on behalf of another, but who lacks the relevant competency, must act in accordance with advice from a suitably competent subordinate.

Subordinates are deputised for by their manager i.e., the Director of Aerodrome Operations takes over the responsibilities of the Head of Airfield Operations.

2.2.3: g) Outside of normal office hours

Due to the disparity between office based and shift based working patterns, it may be necessary for a subordinate to take over their manager's safety responsibilities.

This is particularly the case for the Airfield Operations Duty Managers (AODM).

In general, the AODM takes over the Airfield Operations Manager safety responsibilities outside of normal office hours i.e., nights and weekends. The AODM is deemed competent and is authorised to take any action required to ensure the immediate safety of aircraft operations at any time.

2.2.3: h) Urgent matters/Last resort

At times where an immediate decision needs to be made, the most senior person available (Judged using the organisation charts in this document) is authorised to make a decision that

resolves a temporary situation.

At the earliest opportunity, any temporary decisions will be reviewed through the standard formal processes described in this manual and any further action or changes taken as appropriate.

The Incident Management Team (IMT) roster ensures that a member of the MA senior management is available 24 hours a day, 365 days a year. The IMT roster is designed to ensure senior management presence immediately should the situation warrant it. The IMT roster is also aligned to the Manchester Airport Emergency Response Manual which take effect should an emergency occur and therefore ensure that the correct decision makers are always in place.

2.2.3: i) Long-term absence

Should a colleague with safety responsibilities remain absent for an extended period (i.e., Over six weeks) arrangements should be made to introduce a temporary position to act up, refer to table 2.2.3(c).

The position that is temporarily covered would be preceded by the word “Acting” e.g., Acting Asset Management Lead.

This temporary post would then assume the full safety responsibilities of the post being covered. Consultations with HR will precede confirmation of any long-term temporary arrangements.

NB - This policy only reflects deputising for absence regarding safety responsibilities. Local policies are in place for covering standard items such as meeting attendance, sickness reporting etc.

2.2.3: j) Exceptional Circumstances

There may be rare occasions where a need arises to carry out operations against set policies. for a temporary period, such as during development works.

Any temporary procedures will be carefully assessed, and special measures put in place to ensure that safety is not compromised.

These exceptional circumstances will require approval from the Director of Aerodrome Operations or will be approved through the Aviation Safety Board.

2.2.4 Documentation and Data Management/Control Procedures

2.2.4: a) Types of Documentation and Notices

The following table lists the major safety documents issued by MA Operations:

Document Title	Brief Description	Issue frequency	Available online?
Aerodrome Manual	A CAA specified mandatory document outlining characteristics and procedures for operations at Manchester Airport. The MA Aerodrome Manual is split into five parts as outlined below.	Major annual re-issue, version updates as appropriate.	Yes

Aerodrome Manual Part A - General	Introduction to the Aerodrome Manual		Yes
Aerodrome Manual Part B – Safety Management System	Safety Manage System (SMS) describing Manchester Airports commitment to safety		Yes
Aerodrome Manual Part C – Particulars of Aerodrome Site	Manchester Airport location, features, facilities, and services.		Yes
Aerodrome Manual Part D – Particulars of the Aerodrome required to be reported to AIS	Details Aerodrome features required to be reported to the Aeronautical Information Service		Yes
Aerodrome Manual Part E – Aerodrome Operating Policies and procedures	Details policy and procedures for operating on the airfield at Manchester Airport		Yes
Supplementary Instruction (SI)	A Supplementary Instruction forms part of the Aerodrome's Safety Assurance process; as a means of timely notification to users, of any permanent change to the content of regulatory or safety critical documentation.	As required	Yes
Operational Advice Notice (OAN)	An Operational Advice Notice is used to advise of any operational change, which will not prompt a permanent amendment to a regulatory document, but which requires to be communicated to users.	As required	Yes
Information Notice (IN)	An Information Notice is used as a general communication platform to notify operational or administrative pertinent information, which does not warrant the issue of a SI or OAN.	As required	Yes
Aerodrome Safety Alert (ASA)	An Aerodrome Safety Alert will be issued to communicate immediate safety concerns relating to operations, equipment, or environment; and to highlight negative safety trends.	As required	Yes
Minor Works Brief	A notice issued in advance of minor works being carried out. Minor works may also be subject of an Operational Advice Notice	As Required	No

2.2.4: b) Document Owners

Document	Owner
Aerodrome Manual Part A, B, C, D, E	Head of Aerodrome Compliance
Manchester Airport Emergency Response Manual	Business Continuity & Resilience Manager
Supplementary Instructions (SI)	Airfield Operations, Safety & Compliance
Operational Advice Notices (OAN)	Airfield Operations, Safety & Compliance
Information Notices (IN)	Airfield Operations, Safety & Compliance
Aerodrome Safety Alert (ASA)	Aerodrome Safety & Compliance Manager
Minor Works Brief (MWB)	Airfield Operations, Safety & Compliance
System Risk Assessment (SyRA)	Aerodrome Safety & Compliance Manager
Safety Risk Assessments	Airfield Operations, Safety & Compliance
Development Risk Assessment (DRA)	Airfield Operations, Safety & Compliance
Operational Risk Assessment (ORA)	Head of Aerodrome Compliance

2.2.4: c) Issue Methods

Documents are issued electronically.

Electronic documents are issued to ensure that the recipients receive the documents as soon as possible and to reduce the need for printed controlled copies that require manual updating.

These include Operational Advice Notice, Supplementary Instruction, Information Notice, Aerodrome Safety Alert, Aerodrome Manual & Manchester Airport Emergency Response Manual. The latest and current versions of most documents are always available on request.

An email will be sent notifying all those on the mailing list that a new version of the document is available.

If an individual chooses to print off or download any document, they do so under the understanding that the document is then uncontrolled and may not be relied upon for operational reference, unless a local procedure is put in place to become controlled. Relevant warnings are applied to all documents where this may be the case.

2.2.4: d) Amending of Controlled Documents

Please see 0.2.4 Document Identity/Version Control, for more information.

2.2.4: e) Document Naming Structure:

AM	“EGCC-type of document-department who owns the document-document ref i.e. EGCC-M-AOPS-001
SI, OAN, ASA, MWB	“Abbreviated Document Name” “Issue” “YYYY” i.e. ASB 01-2017
SRA, DRA, ORA	“Abbreviated Document Name” “Issue” “YYYY” i.e. DRA 01-2017

2.2.4: f) Operational & Administrative Changes

An Operational Change is a significant alteration to existing work practices that is permanent. Such changes require a supplementary instruction of the relevant document(s) to be issued.

An Administrative Change is something such as spelling, grammar, operator update and the like. This does not require a new version of the relevant document(s) to be issued, and as such, changes will be made without notification.

2.2.4: g) Email Address

Documents are issued from the following email addresses: airfieldoperations@manairport.co.uk, alsc@magairports.com .

2.2.4: h) Changes to Regulatory Documentation

It is crucial that operational documentation received from external companies is kept up to date, especially where using incorrect information could result in non-compliance with regulation.

Any new regulation received will be assessed at the ASB. Where any necessary actions are agreed, they will be delegated to a responsible post holder.

A document library is held within the Aerodrome Management System SharePoint site that contains all relevant documentation.

2.2.4: i) Aeronautical Data Quality (ADQ)

Procedures for the management of aeronautical data quality are contained in Aeronautical Data Quality Manual. EGCC-M-AOPS-010

2.2.4: j) The Recording of Aircraft Movements

MA uses Chroma Fusion which is an airport operations database which records all movements and associated remarks.

2.2.4: k) Record Keeping

Manchester Airport will ensure that operational safety records are kept for a minimum of 5 Years, subject to applicable data protection law and stored in a manner that ensures protection from damage, alteration, or theft, as per MAG's retention policy

2.2.5 Safety Risk Management

2.2.5: a) Introduction

Safety Risk Management is the vital core activity that is the foundation of the overall Safety Management System.

Safety risk management is a generic term that encompasses the assessment and mitigation of the safety risks of the consequences of hazards that threaten the capabilities of an organisation (ICAO Doc 9859 AN/474).

The Manchester Airport Safety Policy states that risks must be managed, and that appropriate safety information is provided to all airfield users and employees to ensure that people are aware of risks and relevant safety control measures.

Aviation is, by nature, a business that requires careful management of the inherent and latent hazards involved, as it is not practicable to eliminate all hazards from the operation. Not all safety risks are avoidable, and under certain circumstances, the cost of nullifying a risk

outweighs the benefits gained. The safety risk management process is designed to ensure that Operations safety risks are reduced to be As Low as Reasonably Practicable (ALARP).

This section describes the operational safety risk management process for Manchester Airport Operations and how we ensure that the policy is achieved. Note that a separate method of risk assessment is used throughout the Group for assessment of Health and Safety hazards relating to specific job-related tasks.

2.2.5: b) Definitions and Terminology

Hazard: A condition or an object that has potential to cause harm to personnel, result in damage, or reduce the ability to perform a prescribed function.

Consequence: The possible adverse outcome or outcomes resulting from the realisation of a hazard.

Severity: The extent of harm or damage associated with the consequence of a hazard being realised. (These are categorised for the purposes of the risk assessment process in Table 1 later).

Likelihood: The chance, or probability, of an adverse consequence or condition occurring. (These are categorised for the purposes of the risk assessment process in Table 2 later).

Safety Risk: An expression used to describe the overall assessment of a threat presented by the potential adverse consequences of a hazard. This is described as a combination of the predicted likelihood and severity of an undesired occurrence.

Safety Control Measures: are protective mitigations put in place aimed at preventing or reducing either the severity or the likelihood of an undesired occurrence or adverse consequence.

Safety Recovery Measures: are reactive mitigations put in place, aimed at reducing either the severity or the likelihood of an undesired occurrence or adverse consequence. These safety control and recovery measures may be human (procedure and rules), physical (barriers and containment) or Technological (alarm systems and software controls), for example. Safety Risk Management is the vital core activity that is the foundation of the overall Safety Management System.

2.2.5: c) Safety Risk Management Methodology

i Objective

This process is designed to enable personnel to conduct and provide guidance in conducting safety risk assessments.

ii Requirement

The safety assessment process is the foundation for all safety management activity. It is vital to identify, analyse and eliminate or effectively control all risk. The process of identifying the risk also assesses the safety of all parts of a system, operational requirement, maintenance process or work practice.

Safety assessment is carried out to ensure that the management of any hazard is commensurate with the risk involved and the safety objectives identified. It is not possible to produce an exhaustive list detailing every circumstance requiring safety assessment.

iii Scope

There are broadly four different circumstances in Operations that will drive the requirement for an Operational safety risk assessment. These are: -

Aviation Risks. These are risk assessments relating to the normal operational running of the aerodrome and any predictable abnormal circumstances. Where change to the operation is planned, or new equipment or systems introduced, a revised or new safety risk assessment will be required. Identification of a new hazard is also likely to lead to a new safety risk assessment.

Development Risks. These risk assessments relate to construction activity and major maintenance on or around the aerodrome.

Operational Risks. These are typically risk assessments related to personnel operational events.

Dynamic Risks. These are typically risk assessments related to risks that can evolve rapidly or unexpectedly

iv Responsibilities

The information in this part of the Aerodrome Manual is not intended to be exhaustive or to be sufficient to educate personnel to conduct a safety risk assessment. This is a reference to the outline and principles of the safety risk management process employed in Manchester Airport Operations.

Responsibility for carrying out risk assessments lies with the nominated competent risk assessment owners and nominated members of the operations team.

2.2.5: d) Competence for carrying out Safety Risk Assessments

Competence for carrying out safety risk assessments is determined through a combination of training and practical experience. Refer to the MA Operations Safety Competency Framework.

2.2.5: e) The Aviation Risk Management Process

The following key activities describe the aviation risk management process

Step 1 – Identification of Hazards & Consequences

The first stage of a new safety risk assessment is the preliminary hazard identification (often referred to as a PHI). A structured approach to the identification of hazards ensures that, as much as possible, most hazards in the system's operational environment are identified.

Hazard identification will utilise experienced day-to-day operational personnel from duty supervisory and management level to more senior management personnel. This will ensure that the PHI includes people with a thorough knowledge of the process, system or hazard being addressed. A PHI can also be applied to existing risk assessments and should capture the hazards and likely precursors or causes of the hazards. At this stage, preventative or control measures should not be analysed.

Techniques for ensuring a structured approach include the use of operational hazard analysis checklists to more formal group review sessions to brainstorm hazard checklists, operational and safety issues more broadly.

Hazards are constantly identified and reviewed through reactive, proactive, and predictive sources and underlying methods of safety information collection and analysis as identified above and elsewhere in the SMS. It is a continuous process within safety management that safety performance data and near miss observations are analysed to detect whether a hazard and associated safety risk requires a review in the light of actual indications.

Hazard identification considers a combination of internal and external sources, reactive, proactive, and predictive processes. The scope of hazards in aviation is wide.

Examples of the scope of factors and processes that should be investigated when engaging in hazard identification include:

- Natural hazards, such as terrain, adverse weather and geophysical events (earthquake, volcano, flood).
- Technical factors, hardware components, software, tools, and equipment.
- Design factors, including equipment and task design, and the error tolerance of equipment and the resilience of equipment to errors and failures.
- Procedures and operating practices, including their documentation and checklists, and their validation under actual operating conditions.
- Communications, including means, terminology, and language.
- Organisational factors, such as company policies, operating pressures, training, and allocation of resources.
- Environment factors, such as ambient noise and vibration, temperature, lighting and the availability of protective equipment and clothing.
- Detection and warning mechanisms.
- Human performance, such as medical conditions, physical limitations, mental limitations, overload, distraction, and human error traps.

Hazards may be identified through reports of actual safety events (accidents or incidents), or they may be identified through proactive and predictive processes aimed at identifying hazards before they precipitate safety events. There are a variety of sources of hazard identification; some are internal to the organisation and others external to the organisation.

Sources for identifying hazards include, but are not limited to:

- Safety reports and performance analysis.
- Formal investigations and accident reports.
- Safety audits and monitoring systems.
- Safety surveys or studies.
- Knowledge and experience from subject matter experts.
- Feedback from training or peer observations.
- External industry sources, such as CAA safety data, information exchanges and other organisations.

For safety management, the consequences of hazards should be described in operational terms. Many hazards hold the potential for the ultimate and most extreme consequence: loss

of human life. Most hazards hold the potential for loss of property, ecological damage, and similar high-level consequences. However, describing the consequences of hazards in extreme terms makes it difficult to design mitigation strategies, except cancellation of the operation.

To design mitigation strategies to address the safety concerns underlying the less than-extreme, lower-level operational consequences of the hazard (for example, crosswind), such consequences must be described in operational terms (runway lateral excursion), rather than in extreme terms (loss of life).

Step 2 – Estimation of the Severity of the Consequences of the Hazard Occurring

Table 1 – Severity Ratings		
Severity	**Potential Consequences**	**Value**
Catastrophic	• Aircraft/equipment/vehicle/structure destroyed. • Fatality or multiple fatalities, or multiple serious injuries. • Major fire or explosion with substantial loss of critical infrastructure. • Total reduction in safety margins, sever physical distress, or workload such that the operators cannot be relied upon to perform their tasks.	A
Hazardous	• Extensive damage to aircraft/equipment/vehicle/structure. • Single major injury; loss of limbs, permanent disability, (RIDDOR Serious). • Fire or explosion with partial loss of critical infrastructure. • Significant reduction in safety margins, physical distress or workload such that the operators cannot be relied upon to perform their tasks accurately or completely.	B
Major	• Moderate damage to aircraft/equipment/vehicle structure. • Lost time injuries to person(s) (RIDDOR Reportable). • Fire or explosion with partial loss of infrastructure. • Reduction in safety margins, distress, or workload such that the efficiency of the operators cannot be relied upon.	C
Minor	• Light damage to aircraft/equipment/vehicle/structure. • Minor injuries (First Air treatable). • Fire or explosion with disruption to operations. • Operating limitations.	D
Negligible	• No damage to aircraft/equipment/vehicle/structure. • Nuisance or distraction, but zero injury or near miss. • Fire with no disruption to operations. • Slightly reduced margin of safety but controlled within existing procedures.	E

Step 3 – Estimation of the Likelihood of the Hazard Consequences Occurring

Table 2 – Likelihood Rating		
Likelihood	**Description**	**Value**
Frequent	Occurs about once a week, known to occur at EGCC 50 times per year on average.	5
Occasional	Occurs about once a month, known to occur at EGCC 10 per year on average.	4
Remote	Occurs about once a year, known to occur at EGCC once per few years.	3
Improbable	It occurs about 5 to 10 years, known to occur at EGCC rarely.	2
Extremely Improbable	Occurs less than once in 10 years, not known to occur at EGCC, but may be known to have occurred worldwide rarely.	1

It is likely that for many hazards, there are several possible outcomes, each with varying degrees of consequences. These outcomes must be analysed separately in the risk assessment process and listed in the consequence analysis section of the form EGCC-F-SMS-004 - SM400. The individual outcomes are then judged for the possible range of the degree of severity of the identified consequences.

Next, the likelihood of the identified consequences is judged, or predicted, possibly using quantitative analysis methods where data or research exists to support it. Again, this is carried out for each of the range of consequence severities that have been listed if this is applicable.

The overall level of safety risk is then determined using the highest of any range of severity identified, along with the associated likelihood of the outcome at that level of severity. The level of safety risk is processed using the combination of the severity and likelihood of that consequence, using the Safety Risk Tolerability matrix in Table 3. This gives an output in terms of a numeric index and a colour coding in each box within the matrix. This is sometimes referred to as a composite risk index.

The next step in the safety risk assessment process is the confirmation of the tolerability of the level of safety risk.

Step 4 – Safety Risk Tolerability, Sign Off & Validity

The assessment part of the safety risk assessment takes place during the consequence analysis stage. This consists of making a judgement of both the likelihood of each event (or series of events) that lead to hazardous consequences and the associated potential severity of those consequences.

In this process, the assessment is made based on the existing and / or planned safety control measures being in place. Finally, the tolerability of the overall level of safety risk is determined with reference to the range and highest severity of the individual hazards.

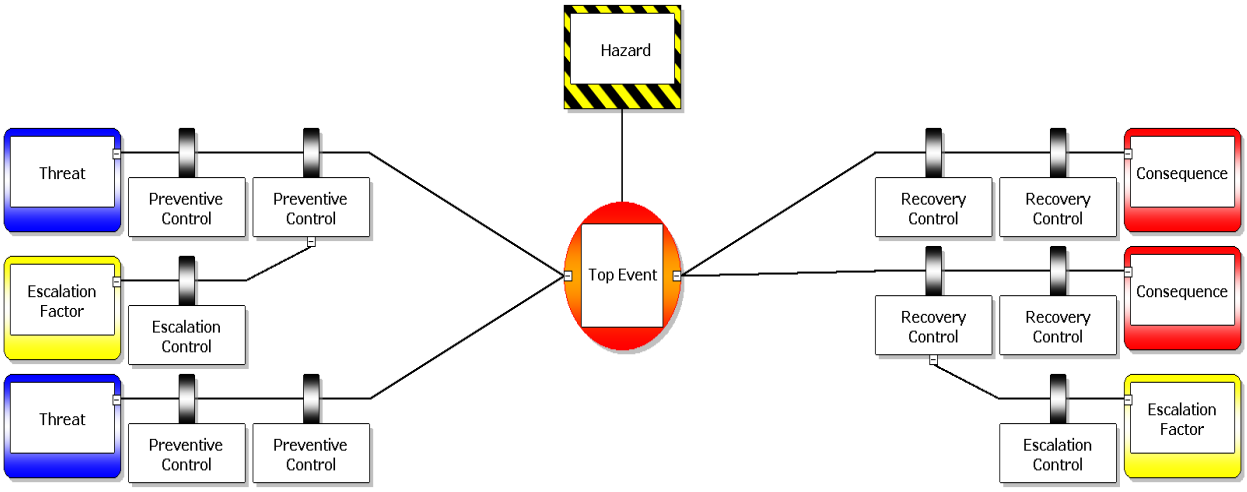
Table 3 – Safety Risk Tolerability Matrix					
	Catastrophic (A)	**Hazardous (B)**	**Major (C)**	**Minor (D)**	**Negligible (E)**
Frequent (5)	5A	5B	5C	5D	5E
Occasional (4)	4A	4B	4C	4D	4E
Remote (3)	3A	3B	3C	3D	3E
Improbable (2)	2A	2B	2C	2D	2E
Extremely Improbable (1)	1A	1B	1C	1D	1E

2.2.5: f) Risk Assessment Methodology

i Bow Tie Methodology

The methodology used to conduct aviation safety risk assessments is based on a model known as the "bow tie". This is because diagrammatically, the approach represents a bow tie shape as illustrated below.

The bow tie model consists of different elements and revolves around the hazard (The potential to cause damage or harm) and the top event (The release or loss of control of the hazard) and splits the risk assessment into 2 parts. The first is the **threat analysis** (alternatively referred to as the causal analysis) and the second part is the **consequence analysis** (alternatively referred to as the event analysis). Diagrammatically, the hazard and top event is placed at the centre with the top event forming the "knot" of the bow tie, with the threats and chain of events on the left-hand side, together with the **control measures** to prevent them, and top event consequences on the right-hand side, together with **recovery measures** that mitigate against the **consequences**.



ii Threat Analysis

This is an analysis of the chain of events and circumstances that lead to the top event being present. The threat analysis has the following steps:

- Identify the precursors and possible causes that lead to the release of the hazard and the top event being present.

- Describe the existing, or designed, safety prevention and control measures.
- List references to any relevant procedures associated with the control measures.
- Identify escalation factors which are a condition that led to increased risk by defeating or reducing the effectiveness of control or recovery measures.
- Assessment of the effectiveness of existing and new Safety Measures or Barriers (Strong, Acceptable or Weak). This is achieved using qualitative effectiveness ratings, split up into adequacy and reliability taking on account who owns the Barriers, the type of Barriers and previous experience in use of the Barrier. As part of this process, existing Barriers are assessed for effectiveness upgrading/downgrading.
- Identification of any further actions required to change existing procedures or for new measures to meet the ALARP principle.

iii Consequence Analysis:

This is an analysis of the possible undesired outcomes and adverse consequences that could result from the top event hazard being realised. The consequence analysis has the following steps:

- Detail the possible outcome or range of outcomes that are caused when the hazard is realised.
- Assess the **Severity** of the outcome (considering the realistic worst foreseeable scenario but also referring to the likely range of outcomes).
- Assess the **Likelihood** of the outcome (again, with reference to the realistic worst foreseeable scenario, but also referring to the likely range of outcomes).
- List references to any safety data sources and assumptions used in the assessment of the consequences or relevant causes.

Following the completion of the causal and consequence analysis, final steps in the safety risk assessment process are then: -

- Confirm the overall level of risk and determine whether it is tolerable or not.
- If tolerable, confirm any further actions, owners, and dates for completion.
- Sign-off the assessment at the relevant level.
- Determine the review date.
- File the documentation within the Aerodrome Safety Management System.

Green TOI

This may be used to address a short-term situation where the scope and impact are limited and can be reasonably handled at Duty Management level at, or near to, the time of the event. Such an event might be:

- Unplanned maintenance work on a taxiway surface
- Failure of AGL service, or depletion of RFFS capability

An Operational HAZOPS will be carried out in accordance with Operational Hazard Analysis Checklist and will normally entail a discussion with the ATC Watch Manager and other key operational post holders. There will be no formal recorded assessment of specific risks, but rather the process will show what issues have been considered and what measures have been put in place to mitigate any reduction in facilities or capability. Actions to address each of the checklist items will be agreed between the parties and recorded on the checklist.

iv References

a) Aerodrome Manual Part B.
b) CAP795 – Safety Management Systems – Guidance to Organisations
c) ICAO Document 9859 – Safety Management Manual

2.2.6 Monitoring of Implementation and effectiveness of Safety Actions and Risk Mitigation measures

2.2.6: a) Scope:

Safety performance monitoring and measuring is the safety management process by which the safety performance is verified in comparison to its safety policies and objectives, including.

- Safety reporting (collection of data)
- Safety analysis and safety studies
- Safety inspections
- Safety audits

2.2.6: b) Measurement

The safety management process requires feedback to provide a baseline for assessing the safety performance so that necessary adjustments can be made to affect the desired level of safety. To determine the system is working recorded safety data will be analysed within the context of established key performance indicators with results set against safety performance targets. Methods of analysis include:

- Statistical analysis - Statistics are compiled as dashboards and presented to the relevant managers monthly. Details are promulgated to staff via briefings and to third party aerodrome operators via the Airfield Safety Committee or Pilots Liaison Group/Local Runway Safety Team (as appropriate).
- Trend Analysis - Safety data will be utilised for monitoring of trends both internally and externally through the relevant safety committees. Any emerging trends will be highlighted which may indicate the existence of new hazards.

2.2.7 Safety Performance Monitoring

2.2.7: a) Introduction

To ensure the continuous improvement and development of organisational safety standards, it is imperative that safety performance is consistently reported and thoroughly analysed. This process not only identifies areas requiring corrective action but also evidences improvements achieved, thereby providing constructive feedback and reinforcing the effectiveness of the Safety Management System.

Safety performance monitoring at Manchester Airport is owned by the Aerodrome Safety & Compliance team. An Airfield Safety Management dashboard reports data in the following key areas:

Runway Safety:	**Air Navigation Services**
Runway Incursions	Airprox
Runway Excursions	Loss of Separation

Runway Friction Runway AGL	Level Bust Zone Infringement Laser Drone
Wildlife Control: Confirmed Wildlife Strike Events Unconfirmed wildlife strike events Near miss strike events Risk Category or wildlife observed. Wildlife dispersal methods deployed. Grassland Management	**Aircraft Taxiing** Deviations from cleared taxi routing Aircraft parking errors Obstructed to taxiing aircraft by 1) Vehicles 2) Stationary Equipment Damage to aircraft manoeuvring
Turnround Related Incidents Damage to aircraft on stand Damage to aircraft manoeuvring Pushback Error Vehicle Accident FOD	**Safety Assurance** SafeDock Operator error AOR summary reports Turnround Audits Non-compliance CAP642 Vehicle and Equipment Inspections
MOR MOR event vs submitted ECCAIRs	**Safety Awareness Promotion** Airside Safety Alerts

2.2.7: b) Safety Severity Categorisation (SSC)

To further develop effective safety performance indicators, the Safety Severity Categorisation system (SSC) is operated through the Aerodrome Safety & Compliance team. Rather than focusing purely on the number of certain types of events, this system ranks each event according to severity of outcome.

Targets are then set against the number and severity of all safety events and updated annually by the ASB. The advantage of this type of system, rather than setting a target of, for example, no more than 30 bird strikes per year, is that it allows focus to be immediately fixed on the most serious events, regardless of the immediate cause.

Such a system does not replace standard monitoring of individual types of safety event but focuses resource on investigating and improving the high-risk areas. General safety performance is described in chapter 10 of this document.

A table of SSC ratings are on in sections 2.27 c) and 2.2.7 d) of this document.

2.2.7: c) Categorisation of Incidents: ATC & Airfield Operations

MAG Manchester Airport	CATEGORISATION OF INCIDENTS: AIR TRAFFIC CONTROL AND AIRFIELD OPERATIONS				
Type of Event	Level 5 NEGLIGIBLE	Level 4 MINOR	Level 3 MAJOR	Level 2 HAZARDOUS	Level 1 CATASTROPHIC
Airborne Collison Risk Airprox by Aircraft Loss of Separation Level Bust Airspace Infringement	No adverse effect and no intervention required.	Traffic conflict but no significant adverse effect, routine intervention.	Event that required urgent intervention to avoid being serious	Event that narrowly avoided a collision. No opportunity to intervene.	Aircraft Collision.

Zone Infringement by Pilot Zone Infringement by RPAS					
Runway Incursion	Incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.	An incident characterized by ample time and/or distance to avoid a collision.	An incident in which separating decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.	A serious incident in which a collision was narrowly avoided.	Aircraft Accident.
Runway Excursion	Aircraft wheels strayed off paved surface, but pilot was able to steer back onto pavement with no damage sustained.	Aircraft leaves runway (requires recovery) but remains fit for use.	Aircraft leaves runway (requires recovery) but not fit for use.	Aircraft leaves runway sustaining damage which renders unfit for use, substantial repairs required.	Aircraft destroyed.
Damage to Aircraft	Evidence of contact visible but insignificant.	Damage requiring minor repairs but remains fit for use.	Damage renders unfit for use.	Damage renders unfit for us, major repairs required.	Aircraft destroyed.
Damage to Vehicle or Equipment	Procedure violated with no adverse effect on the ability to use vehicles.	Minor or moderate damage to vehicles or equipment	Major damage to vehicles or equipment. Economic repair possible.	Major damage to vehicles or equipment. Economic repair not possible.	Multiple vehicles or equipment destroyed beyond economic repair.
Confirmed/Unconfirmed Wildlife Strikes	Reported event on or in vicinity of airfield with no physical evidence found.	Strike visible but no adverse effect on flight (Aircraft lands or departs)	Strike visible & Aircraft becomes unserviceable due need for repairs / possible cautionary landing.	Aircraft makes an emergency landing and requires prolonged major repairs.	Aircraft destroyed.

2.2.7: d) Categorisation of Incidents – Definitions

These definitions apply to the severity ratings contained within Section 2.2.7: c) when categorising Air Traffic Control and Airfield Operations incidents:

Common Examples of Minor Vehicle Damage:

- Scratches of paint or scuffs on the body or bumper.
- Small dents that don't affect the frame of alignment.
- Cracked or chipped windshield – if the crack is small and doesn't obstruct vision.
- Broken side mirror – just the glass or casing, not electronics.
- Minor Bumper Damage without internal impact.
- Scuffed wheels or hubcaps.
- Non-functioning bulbs e.g. brake lights, indicators etc.

Common Examples of Major Vehicle Damage:

- Frame or chassis damage – bending or cracking of the vehicle's structural foundation.
- Airbag deployment – usually indicative of a high-impact collision.
- Severe engine or transmission damage – issues that impair performance or require replacement.
- Suspension or axle damage – affects handling and safety.
- Flood damage – water infiltration into the engine, electronics or interior.

- Fire damage – affects any part of the vehicle, especially wiring or mechanical components.
- Extensive body damage – crushed panels, crumpled roof or side, or doors that won't open/close properly.
- Electrical system failure – especially if safety or drivability is compromised.

2.2.7: e) Categorisation of Incidents: Injury, Ill Health, Fire and Damage to Assets

MAG Manchester Airport	CATEGORISATION OF INCIDENTS: INJURY, ILL HEALTH, FIRE AND DAMAGE TO ASSETS				
TYPE OF EVENT	**LEVEL 5 NEGLIGIBLE**	**LEVEL 4 MINOR**	**LEVEL 3 MAJOR**	**LEVEL 2 HAZARDOUS**	**LEVEL 1 CATASTROPHIC**
Injury to Person(s) Employees	No apparent injury or no treatment given.	Injury treatable using basic first aid, or that result in 0-7 days lost time absence.	Treatment beyond basic first aid, or Injury that results in more than 7 days lost time absence.	Serious injury requiring a hospital visit of over 24 hrs or confirmed RIDDOR specified injury.	Fatality or potentially life-threatening injury resulting in permanent disability.
Injury to Person(s) Passengers	No apparent injury or no treatment given.	First aid treated injury including first aid treatment by paramedic.	Injury leading to being taken to hospital by ambulance.	Serious injury resulting in a hospital visit of over 24 hrs.	Fatality or potentially life-threatening injury resulting in permanent disability.
Ill Health Work Related	Not applicable.	Minor acute or chronic ill-health or disease requiring no treatment or can be self-treated.	Moderate acute or chronic disease that is temporary but needs medical intervention.	Medically diagnosed RIDDOR specified disease or other serious acute or chronic illness.	Permanent chronic work-related disease, potentially fatal.
Fire/Explosion	Fire detector activation and site inspection, but no alarm sounding or evacuation. No fire.	Alarm sounding and evacuation. No Fire.	Smouldering or small fire that is fully controlled. Evacuation of building or zone.	Fire involving full scale fire service intervention. Explosion or fire damage limited to one room.	Major fire or explosion with substantial damage or loss of asset.
Damage to Vehicle or Equipment	Procedure violated with no adverse effect on the ability to use vehicles.	Light or moderate damage to vehicles or equipment, out of service for repairs.	Damage renders unfit for use. Economic repair possible.	Damage renders unfit for use, major repairs required or beyond economic repair.	Damaged beyond economic repair, causing moderate or serious business impact.
Damage to Property	Damage visible but no adverse effect.	Damage requires repair to make safe.	Damage causes temporary partial closure of facility.	Damage requires prolonged major repairs with serious business impact.	Building destroyed or partially destroyed beyond repair.

2.2.7: f) SSC Restrictions

- Airprox can only be Minor (Cat C), Moderate (Cat B) or Serious (Cat A).
- Airspace Infringement can be Negligible or Minor. If more serious, will be categorised as Loss of Separation or Airprox.
- Loss of Separation can be Negligible or Minor. If more serious, will be categorised as Airprox.
- Level Bust can be Negligible or Minor. If more serious, will be categorised as Loss of Separation or Airprox.
- Runway Incursion can be Serious (Cat A), Moderate (Cat B) or Minor (Cat C) and **only** Negligible (Cat D) whereby there was little or no chance of collision but meets the CAA definition of a Runway Incursion.

2.2.8 Safety Reporting (including hazard reporting) and investigation

Refer to Aerodrome Manual Part E Airside Standing Instructions EGCC-I-AOPS-009 – "Accident, Incident, and Safety Reporting".

2.2.8: a) Airfield Occurrence Reports

The Airfield Operations Team is primarily responsible for maintaining safety and operational standards within the Airfield Boundary.

All accidents, incidents and safety occurrences within the Airfield boundary are recorded in the first instance on an Airfield Occurrence Report (AOR).

2.2.8: b) Mandatory Safety Reporting

Mandatory Occurrence Reports (MOR's) are submitted in accordance with the Air Navigation Order and as required in Commission Implementing Regulation (EU) No 2015/1018.

It is a requirement of operating at Manchester Airport that all airside accidents and safety related incidents must be reported to MA Airfield Operations. This therefore falls under mandatory safety reporting.

2.2.8: c) Reporting Procedures

- MOR reports should be filed by the appropriate person within 72hrs of the occurrence.
- All reports are to be made using the appropriate CAA/EASA (ECCAIRS2) form.
- Personnel filing MORs are requested to use the mordistribution@magairports.com email address when completing the ECCAIRS2 form, so that a copy is automatically sent to key safety persons.

2.2.8: d) Incident and Accident Investigation

The Aerodrome Safety & Compliance team will initiate and carry out a full investigation into occurrences when a Mandatory Occurrence Report (MOR) is required (See 'Categorisation of MOR Incidents' for more information) and occurrences where the Safety & Compliance Team determined an investigation would be appropriate. This does not include injury to persons, which will be conducted by the Health & Safety team.

The investigation will be fully documented, and witness statements and accounts taken as appropriate. Other organisations may need to be involved such as airlines, handling agents, ATC, and internal Manchester Airport departments. Once completed, results and recommendations will be made, and the completed document presented to the Head of Aerodrome Compliance for consideration.

The Head of Aerodrome Compliance will report through to the Aviation Safety Board, the internal and external investigation findings that may have implications for Manchester Airport's Safety Management System.

Dependent upon the nature of the incident and results of the investigation, a review of procedures or training may be required to prevent a reoccurrence.

It should be noted that an occurrence folder might be opened in response to a non- reportable accident and that an investigation and review will still be undertaken.

2.2.8: e) Follow up Actions.

Following an investigation, appropriate to the severity of the incident, any or all the following actions may be taken:

- Manchester Airport may require additional training for personnel concerned.
- An infringement notice may be served.
- Procedures may be modified.
- 'Lessons Learned' promulgated and shared with relevant stakeholders.

2.2.8: f) Categorisation of MOR Incidents

Categorisation for use with MOR incidents, with objective of prioritising follow up action and response timescale, with indication of a threshold at which follow up investigation is not required.

SEVERITY	**FREQUENCY**			
		High	**Medium**	**Low**
	High	**A**	**A**	**A**
	Medium	**B**	**B**	**C**
	Low	**C**	**D**	**D**

i Definitions

Severity	
High	Serious safety hazard e.g. accident averted by providence, avoidance action taken. Several safety nets failed. Serious injuries or significant aircraft damage were or could have been a possible outcome. RIDDOR reportable. AAIB reportable. Runway Incursion category A or B.
Medium	Significant safety issue e.g., some reduction on safety margins, one or two elements of procedure or safety nets failed. Possibility of small injury, non-RIDDOR or minor aircraft damage. Runway Incursion category C or D
Low	No immediate safety concerns. Service standards may be affected.
Frequency	
High	About once a month on average
Medium	Small number of occasions per year (up to about 4)
Low	Infrequently, once in 2 years or more

ii Response

A	Activity to stop or to be immediately reviewed and put under close monitoring activity.
B	No immediate need to stop activity or make changes to procedures.
C	No immediate action but ALARP measure to be considered. Monitor.
D	No action required but may require further monitoring in the future.

iii Investigation Process

A	Refer to ASCT for urgent investigation. Recommendations to be implemented within 3 months.
B	Refer to ASCT for investigation in routine time. Recommendations to be implemented within 6 months.
C	Sign off at AOR level and refer to AOR procedures.
D	Sign off at AOR level and refer to AOR procedures.

2.2.8: g) Voluntary Safety Reporting

A Voluntary Safety Reporting system is available for Manchester Airport via the Voluntary Safety Reporting Page (CAMMS) . In addition, the reporting page is also available from the Aviation Community App.

2.2.9 Emergency Response Planning

To uphold the continual safety and security of its passengers, customers and staff, Manchester Airport is committed to ensuring that effective emergency and contingency plans are in place.

To ensure this is the case, the dedicated role of Head of Business Continuity & Resilience, and Emergency Preparedness Manager exist, and reports to the Director of Airport Control with matrix reporting arrangements, to the Accountable Manager (Director of Aerodrome Operations) . The scope of Emergency Planning is outlined in this Manual, Policies and Procedures relating to Emergency Plans can be found in the Manchester Airport Emergency Response Manual.

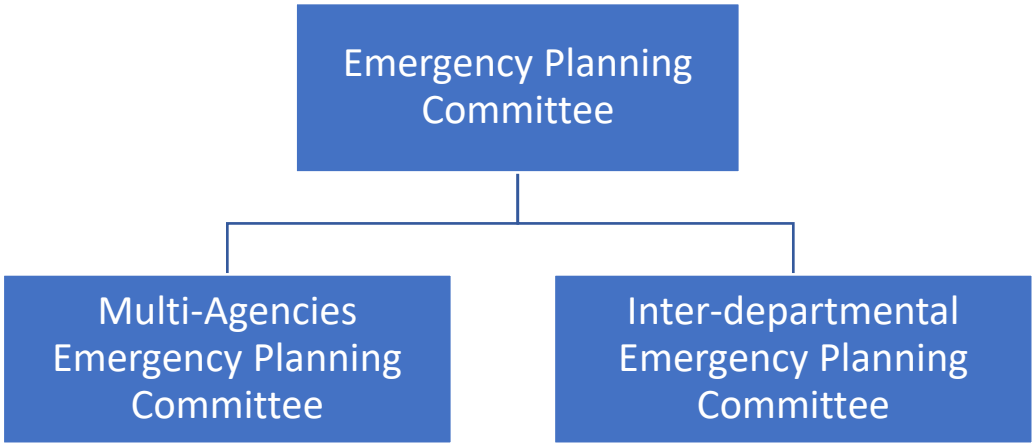
The Manchester Airport Emergency Response Manual describes all aspects of emergency response including:

- Policy and organisation
- Emergency categories
- Emergency management including incident management centre.
- Key organisations and responsibilities
- Communication cascade for each organisation

- Reception centres

Coordination of policy and plans is managed through the Emergency Planning Committee, which is held quarterly and chaired by the Business Continuity & Resilience Manager.

Its stated purpose is to review, discuss and agree policies and plans for emergency and contingency responses including measures to improve general resilience.



2.2.10 The Management of Change

2.2.10: a) Introduction

Any significant changes to the aerodrome operational environment at Manchester Airport (EGCC) that involves key personnel, procedures, equipment hardware, software, space utilisation or infrastructure will need to be managed and assessed to ensure that safety and regulatory standards are upheld. The use of this change management procedure will ensure compliance with the Aerodrome Manual and AMC1 ADR.OR.B.040 and operational continuity risks are fully considered and mitigated as far as reasonably practicable.

This procedure also ensures Air Traffic Services meet the requirements below.

The ATM/ANS Implementing Regulation (UK) 2017/373 Organisational Requirement ATM/ANS.OR.B.10 Change Management procedure states that:

A service provider shall use procedures to manage, assess and, if necessary, mitigate the impact of changes to its functional systems in accordance with points

ATM/ANS.OR.A.045, ATM/ANS.OR.C.005, ATS.OR.205 and ATS.OR.210, as applicable.

ATM/ANS.OR.B.010 also requires that the procedure used to manage changes must be approved by the Competent Authority. In the UK the Competent authority is the Civil Aviation Authority (CAA).

In addition, AMC2 ATM/ANS.OR.010 (a) requires that a register of change is maintained, refer to EGCC-R-SMS-004 – Aerodrome Change Management Register.

2.2.10: b) Scope

In the case of Air Traffic Services this procedure is applicable to all intended changes that may impact on the functional system which is defined as procedures, people, equipment, hardware, and software i.e. any change that impacts on the service provision. This procedure is also applicable to changes in the management systems that may not impact on our service provision. (All changes must be submitted to the CAA using the form SRG1430 Notification of a Change by an Air Navigation Service Provider, referred to as SRG1430 from here on).

In the case of the Aerodrome this procedure is applicable to changes to key personnel, procedures, equipment, infrastructure, space allocation or the management system (involving organisational structure) across all departments at Manchester Airport. (Where applicable, all changes must be submitted to the CAA using the form SRG2011 Application of Proposed Change at and Certified Aerodrome, referred to as SRG2011 from here on).

It should be noted, in some cases the SRG1430 and SRG2011 form may need to be submitted to the relevant sections of the CAA for the same project.

All changes at Manchester Airport will be reviewed for the purpose of the change and the potential benefits. Changes will be assessed for; its viability, will it make things safer, will it make things more efficient, is it realistic and practical to implement. When it is not, the change will not be implemented.

Note: For changes to Air Traffic Control or Air Traffic Engineering equipment, systems and procedures which require a safety case and/or technical risk assessments, and interoperability file see Appendix D flow chart.

2.2.10: c) Responsibility

The Head of Aerodrome Compliance is responsible for implementation of this procedure. The persons responsible for complying with this procedure are those who are authorised to sponsor a change. Individual Heads of Department, Aerodrome Safety and Compliance Manager, Operations Managers, Project Managers, Programme Managers, Asset Managers and Maintenance Managers are responsible for compliance with this procedure within their department. It may also include the Manchester Airport Accountable Manager for major changes requiring regulatory approval.

2.2.10: d) Change Administration

When a change to the airport operation is identified, the change management process shall be initiated by the change owner. This will require the completion of the Change Notification Form and associated safety assessments. Further documentation may need to be completed which will vary depending on the type of change (see Section 2.2.10 e).

All roles and responsibilities of those managing the changes covered by this procedure will be identified at the Senior Leadership Team meeting, the SLT will follow the applicable flow chart shown in Appendix A or B.

Appendix A covers Aerodrome and Appendix B covers Air Traffic Services; the flow diagram shows the procedure to be followed when a change is identified.

The Change Management / Project documentation will be stored in the Change Management folder, a folder will be created when the form is raised, the folder will be hyper linked to the Register.

The Changes Management Register will be used to track any changes raised in the register. the register is located on the Microsoft SharePoint Site

In accordance with the flow charts shown in Appendix A (Aerodrome), all applicable changes are to be notified to the CAA on Change Management form SRG 2011 which is available from the CAA web site.

In accordance with the flow charts shown in Appendix B, all Air Traffic Services changes are to be notified to the CAA on Change Management form SRG 1430 which is available from the CAA web site.

2.2.10: e) Change Types

i Development of New or Upgraded Infrastructure

Definition	Where new or upgraded infrastructure is to be provided.
Examples	• A runway extension resulting in new declared distances or extra RESA • New buildings which are located airside or which impact on the movement area or affect aircraft operations, such as but not limited to hangars, terminals, taxiways & stands • Extensions to buildings • New taxiways or aprons • Upgrade to a taxiway, such as widening to a higher code • Installation of apron floodlighting • A new AGL installation or upgrade intended to facilitate additional operations • Installation of aids to navigation (ILS, radar, airfield signage or other equipment)
Documentation Required	(1) Change Notification Form (2) SRG2011 and/or SRG1430 as appropriate. (3) CAP791

ii Changes to Aerodrome Infrastructure or Physical Characteristics

Definition	Where existing aerodrome infrastructure or physical characteristics are being changed.

Examples	• Reconfiguration of aircraft stands • Changes to the runway or declared distances • Removal or amendment of existing non-conformities (SC) • Change of airfield ground level or slopes due to excavations, or re-grading • Relocation of navigation aids or airfield obstacles • Change in building materials which may cause a glare hazard
Documentation Required	(1) Change Notification Form (2) SRG2011 and/or SRG1430 as appropriate. (3) CAP791

iii Maintenance of Existing Infrastructure

Definition	Where existing infrastructure is being repaired, refurbished or replaced, but without significantly changing the characteristics of the piece of infrastructure.
Examples	• Partial or complete runway rehabilitation • Partial or complete taxiway rehabilitation • Re-wiring or replacement of AGL systems • Other maintenance which may last for weeks/months and involve many key stakeholders
Documentation Required	(1) Change Notification Form (2) SRG2011 and/or SRG1430 as appropriate

iv System/Equipment Change

Definition	When a key item of operational safety equipment (aerodrome/ramp/RFFS, ATS) is changed or introduced.
Examples	• New ground handling equipment • New RFFS appliance • New airfield winter equipment or machinery
Documentation Required	(1) Change Notification Form (2) SRG2011. (3) CAP791

v Procedural Change

Definition	When a significant procedural change occurs, for example due to a new regulation or safety recommendation from the CAA.
Examples	• Change to the airport's Low Visibility Procedures • Change to the level of RFFS category or provision • Change to aerodrome inspection procedure • Change to procedures for use of a contaminated runway • Change to wildlife control procedures

Documentation Required	(1) Change Notification Form (2) SRG2011

vi Changes to the Safety Management System

Definition	Significant changes to the management system, involving organisational structure. Changes to personnel do not need prior approval from the CAA, however where it is intended that an individual role takes on additional responsibility or the current structure's reporting line changes, this will need prior approval.
Examples	• Change of key personnel, as listed in the Aerodrome Manual • Change to the organisational structure (operations), as shown in the Aerodrome Manual • Change to reporting lines
Documentation Required	(1) Change Notification Form (2) SRG2011 and/or SRG1430 as appropriate.

vii Changes to ATS Systems, Processes or Documentation

Definition	Significant changes to the functional system, involving organisational structure. Changes to personnel do not need prior approval from the CAA, however where it is intended that an individual role takes on additional responsibility or the current structure's reporting line changes, this will need prior approval.
Examples	• Change to the contents of MATS Part 2 • Change to the organisational structure (operations), as shown in the Aerodrome Manual
Documentation Required	(1) Change Notification Form (2) SRG1430 (3) Safety Case (as determined by Impact Assessment) (4) Hazard log (as determined by Impact Assessment)

2.2.10: f) Documents Requiring Amendment

It is likely that most changes proposed will require amendments to one or more documents. Many of the airport documents are stored electronically on SharePoint and as such are controlled using the Document Control procedure. Documents which are controlled outside the of this will be controlled using the Airport Document Control procedure. Some changes may require new documentation, for example a new procedure for the use of a new aircraft de-icing pad. Each Department Head (or nominated change owner) is responsible for identifying any new documents and the amendment requirements of existing documents.

Once identified, appropriate documents should be impact assessed using the department specific impact assessment form.

2.2.10: g) Aerodrome Certification Specifications

Where applicable, the proposed change should be designed to comply with the relevant Certification Specifications (CS) from ADR-DSN. Demonstration of how compliance will be achieved shall be stated on the compliance matrix, either SRG2011 for changes requiring prior approval, or for changes not requiring prior approval, see Section 2.2.10.j and Section 2.2.10.q of this manual.

2.2.10: h) Internal Change Approval

The Change Notification form is prepopulated with the Airport Organisation key stakeholders; this is to ensure subject matter experts are given the opportunity to identify hazards and ensure mitigations have been identified and put in place before they sign the change off to proceed. Additional stakeholders will be added to the by the change owner as required. The change must not proceed until all stakeholders have signed the form, or in their absence a nominated deputy has given approval.

Any change requiring regulatory approval, or which will affect Certification must be approved by either the Head of Aerodrome Compliance or the Accountable Manager prior to implementation or any work being undertaken on physical changes.

2.2.10: i) Change Closure and Review

Once the change is complete, the completion date shall be entered onto the change notification form and onto the Change Management Register.

i Change Closure Review Board

The Change Closure Review Board will consist of the Accountable Manager, Head of Aerodrome Compliance, Head of Airfield Operations, and the change owner. If one of the post holders identified above is not available due to sickness, long term absence or extended annual leave, they can be replaced by a member of the Airport Senior Leadership team. The SLT member must be independent of the change. The change owner will present all documentation/records to the board and satisfy them that all the documentation for the project has been stored correctly with the change administration completed in accordance with the procedure.

The change owner will be responsible for scheduling the Change Closure Review Board meeting.

The Change Review Board will complete and sign the form Change Closure Checklist as a record of the formal closure of a change or project.

The change should be reviewed as a minimum, over a 90-day observation or approximately 6 months after the change closure date, and any further reviews will be assessed by the change owner against the risks posed by the change.

2.2.10: j) Notification to the CAA

i Changes Requiring Prior Approval

The Director of Aerodrome Operations or Head of Aerodrome Compliance shall ensure that an application is submitted to the CAA for any change requiring prior approval, as determined by Regulations (UK) 139/2014.

Changes will be submitted to the CAA Aerodrome Inspector and CAA Developments using SRG2011 or/and the SRG1430 form. Implementation of any change requiring prior approval shall not be implemented until approval is received.

Where applicable the submission will also include:

a) Safety assurance documentation for compliance (part 1) and control (part 2) of the three-part CAP791 submission process.
b) Change notification form.
c) Appropriate detailed design drawings.

A list of changes requiring prior approval for Aerodrome can be found in CAP791.

Note: Any submitted change awaiting approval which is then subject to a further change shall be re-submitted for CAA approval.

ii Changes Not Requiring Prior Approval

Changes that do not require prior approval, (Aerodrome only) as per CAP 791 or AMC1 ADR.OR.B.040(a);(b), shall still be notified to the CAA. This will be done by submitting a spreadsheet of all recorded changes to the CAA Aerodrome Inspector in line with the audit cycle or available for audit on request. This is the responsibility of the Head of Aerodrome Compliance.

Such changes, as deemed appropriate, will still be the subject of a change notification form, including safety assessment.

A list of changes requiring prior approval for Aerodrome can be found in CAP791.

2.2.10: k) Safety Assessment of Changes

The change owner will record the tolerability matrix and version number which has been used to carry out the safety assessment and submit it to the Aerodrome Safety and Compliance team for oversight. If there are any changes to the tolerability matrix during the lifecycle of the project the risk scores must be recalculated using the new matrix and resubmitted.

A safety assessment for a change will include:

i Impact Assessment

1. Determination of the safety criteria applied to the change,
2. Risk analysis in relation to the harmful effect or safety improvements related to the change,
3. Risk evaluation and if required, risk mitigation for the change to meet the applicable safety criteria,
4. Verification that the change meets applicable safety criteria, before the change is put into operation.

ii Safety Assessment

All Departments must carry out a review of staff capabilities to determine if the proposed change can be managed 'in house' or will external contractors be required.

When the change at Manchester Airport impacts in anyway on ATS, ATS will remain responsible for the Safety Assessment throughout the project.

iii Safety Assessment Contents

1. What is being changed?
2. What are the interfaces/interactions of the change with the rest of the functional system?
3. Does the change alter the way the functional system or any part thereof, operates?
4. What are the stages for implementing the change from decision to implement transitioning into service?
5. Will there be any degraded modes of operation during the change implementation?
6. The identification of hazards.
7. The analysis of risk involved in implementing the change.
8. The analysis of risk after implementing the change.
9. How is the changed functional system to be monitored after implementation to ensure the above criteria are met?
10. Provide assurance with sufficient confidence via a completed documented and valid argument that the service will operate as expected and monitor the service post implementation (a safety case).

2.2.10: l) Hazard and Operability Study

Identification of hazards and mitigations should be recoded on the Development and Risk Assessment form (EGCC-F-SMS-005). For changes that do not require recording on the register, a Hazard and Operability Assessment should be raised.

2.2.10: m) Safety Assessment (Support)

For major or complex projects, it is recognised that safety assessments may be conducted by another organisation. Where this is the case, the safety assessment will remain the responsibility of ATS.

2.2.10: n) Review of Interdependencies with Affected Parties

Any parties that will be affected by the change, for example other service providers, airfield tenants or neighbouring communities, shall be identified and thereafter a safety support assessment / safety argument conducted in coordination with the affected party.

The change owner is responsible for identifying, informing, and coordinating with affected parties. Contact details for all the above are held on file by either ATS or the Airfield Operations Department. The process shall be completed prior to the change being initiated/implemented. Details of such assessments shall be recorded on the change notification form as evidence that Manchester Airport has considered the safety impacts of the change on others who may be affected.

2.2.10: o) Contributing Personnel

A team of experienced and qualified personnel will be selected by the person who submits the change notification form. Contributions should be made at formal meetings or brainstorming sessions and the results recorded on the change notification form.

Persons selected to contribute may include, but not limited to:

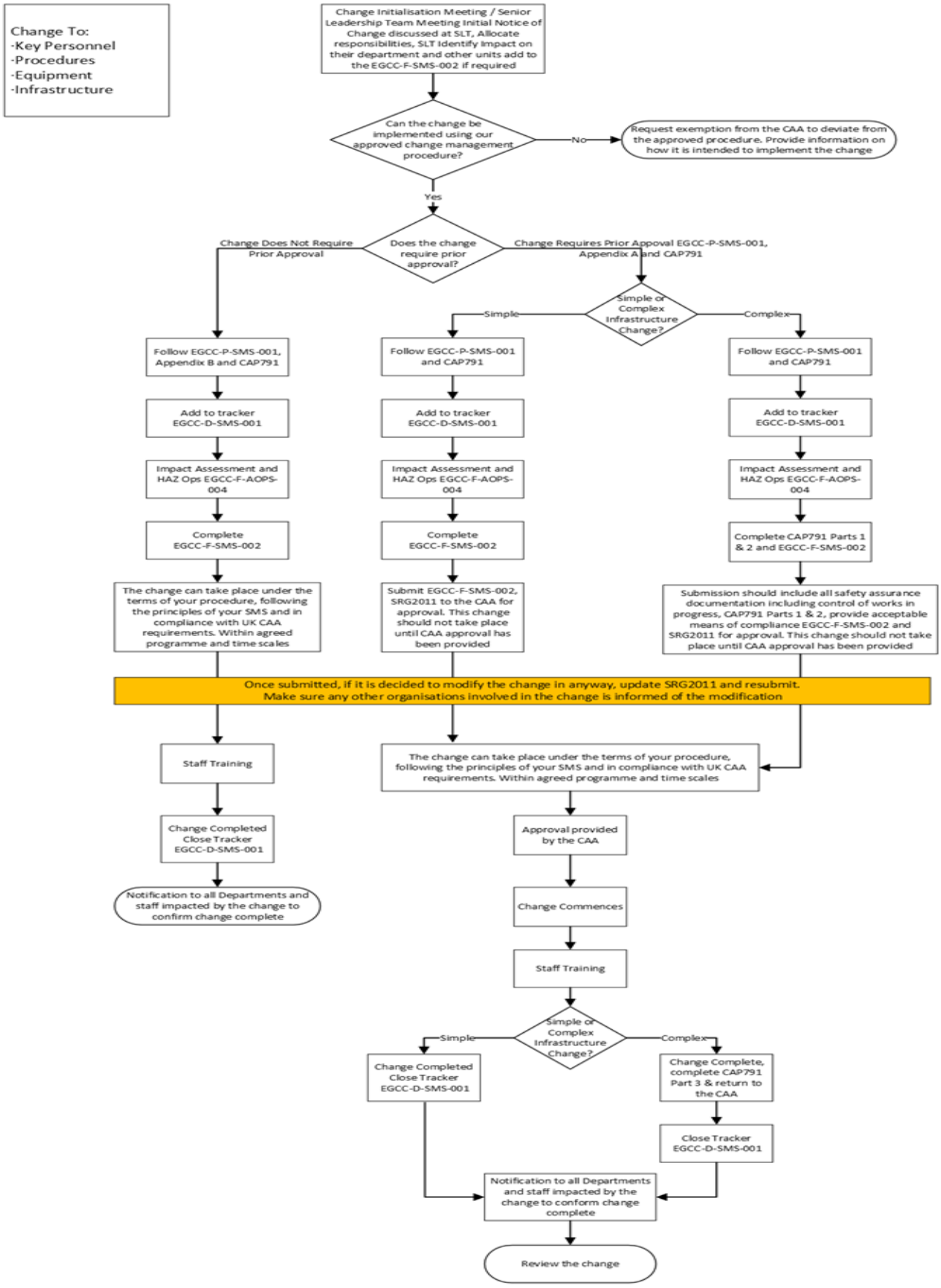
- Air Traffic/AGL Engineers
- Air Traffic Control Officers
- Technical & Safeguarding specialists
- Airfield Operations specialists
- Fire Officers, Experienced fire-fighters
- Engineering specialists
- Human factors specialists
- Safety / risk specialists
- Those responsible for procedure design

2.2.10: p) Change Management Register

Once a change has been proposed using the change notification online process, it will be reviewed by the Aerodrome Change Approval Board (ACAB). Following approval by ACAB it is automatically entered onto the Change Management Register by the system. This register will be used to track the progress of changes from inception through to completion.

The Change Management Register is located on the Aerodrome Management System SharePoint site, within the Change Management Folder.

2.2.10: q) Management of Change



2.2.10: r) Changes Affecting Runway Safety

Particular attention will be given to any changes which may influence runway safety. Changes will be assessed for the potential to lead to any factors which could increase the risk of a runway incursion, excursion, or other runway safety occurrence. Such changes will be carefully assessed by all key contributors, which may include representation from the Local Runway Safety Team as well as the airfield operations team.

2.2.11 Safety Promotion

Promoting and communicating the SMS is key to its success, particularly the sections focussed on behaviours and culture. Several communication methods are used, and they are described below:

2.2.11: a) Operational Documentation and Notices

- Aerodrome Manual
  - Part A - General
  - Part B – Safety Management System
  - Part C – Particular of the Aerodrome
  - Part D – Particulars of the Aerodrome required to be reported to the AIS.
  - Part E – Aerodrome Policy & Procedures
  - Manchester Airport Response Plan
- Supplementary Instructions (SI)
- Operational Advice Notices (OAN)
- Information Notice (IN)
- Aerodrome Safety Alert (ASA)
- Minor Works Brief

2.2.11: b) Promotion and Awareness

To ensure the correct messages about safety are getting to the right people, dedicated awareness campaigns are carried out within the Aerodrome. Rather than standard instruction sheets, the use of branded marketing material helps to bring the safety message to life, as well as embedding the SMS as a corporate sponsored strategy.

Manchester Airport Group (MAG) operate a recognition reward scheme, 'Airside Safety Award' to recognise, respect and appreciate external airside operating colleagues who demonstrate commitment to improving and developing airside safety.

The Recognition programme allows for instant recognition when an airside operating employee behaves in a way that deserves acknowledgment for their actions and achievements.

There is no limit to the number of recognitions awards an employee can receive throughout the year. The 'Airside Safety Award' scheme is maintained and managed by Airfield Operations.

2.2.11: c) Internal Communications

Internal communications through email, intranet, and other publications are used to continuously promote the SMS, both within Operations and MA.

2.2.12 Safety Management Outputs

Monthly Airfield Safety Management Reports of all airside accidents/incidents are produced and discussed at the Safety Performance Committee and ASB.

2.2.13 Safety Performance Indicators (SPIs)

The Aviation Safety Board (ASB) sets Safety Performance Indicators for MAN. The SPIs are reported to the Safety and Resilience Board (SRB), and by each group airport at the bi-monthly Group Safety and Resilience Board (GSRB) meeting. The current SPIs for Manchester Airport can be found at 2.2.7.i and in the below table.

Runway Safety: Runway Incursions Runway Excursions Runway Friction Runway AGL	**Air Navigation Services** Airprox Loss of Separation Level Bust Zone Infringement Laser Drone
Wildlife Control: Confirmed Wildlife Strike Events Unconfirmed wildlife strike events Near miss strike events Risk Category or wildlife observed. Wildlife dispersal methods deployed. Grassland Management	**Aircraft Taxiing** Deviations from cleared taxi routing Aircraft parking errors Obstructed to taxiing aircraft by 1) Vehicles 2) Stationary Equipment Damage to aircraft manoeuvring
Turnround Related Incidents Damage to aircraft on stand Damage to aircraft manoeuvring Pushback Error Vehicle Accident FOD	**Safety Assurance** SafeDock Operator error AOR summary reports Turnround Audits Non-compliance CAP642 Vehicle and Equipment Inspections
MOR MOR event vs submitted ECCAIRs	**Safety Awareness Promotion** Airside Safety Alerts

The integrated structure of safety committees provides for oversight of safety performance and management throughout MA Operations. Safety committees also ensure a framework for safety related issues to be raised in a formal, structured environment that includes senior and accountable managers.

A summary of each committee is given in the following sub-sections.

For details on the remainder of the committees, please contact the relevant chairperson as outlines below.

2.2.13: a) MAG Safety Committees

There are two top-level safety committees, which ensure that safety strategy and policy is aligned across both Manchester Airport and MAG.

2.2.13: b) MAG Group Safety Resilience Board

The Group Safety Resilience Board is a quarterly meeting chaired by the Head of Safety, Fire and Operational Resilience Director. It brings together representation from all MAG companies and sets group wide safety targets and policy. The Chief Operating Officer attends this meeting as the representative for Manchester Airport Operations.

2.2.13: c) Safety Resilience Board (SRB)

Safety Resilience Board is a monthly meeting chaired by the Managing Director of Manchester Airport. The board aims to oversee and coordinate Health & Safety across the whole airport site. The board forms part of the wider Airport Leadership Team meeting which brings together the leaders of Manchester Airport.

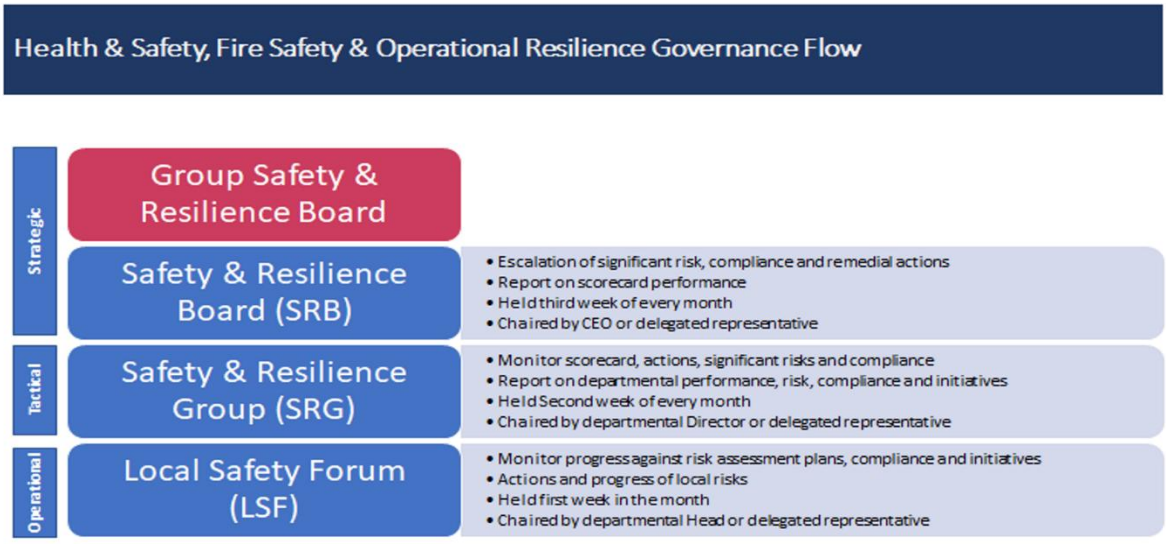
2.2.13: d) MA Aerodrome Safety Committees

There are several aerodrome safety committees that operate within MA Operations. They all have a generic responsibility to ensure that the airfield is a safe working environment for all users.

The Chairperson for each aerodrome safety committee holds the Terms of Reference, as well as the minutes of individual meetings and any other relevant documentation.

2.2.13: e) Health and Safety Forums Structure.

In addition to the aviation safety committees, representation from each aviation department also attend Health and Safety (H&S), Fire Safety and Operational Resilience Forms as outlined below.



2.2.14 Safety Meetings

Manchester Airport holds various safety meetings to ensure that a proactive approach to safety is undertaken. These meetings provide a forum to discuss recent incidents, review safety procedures, share lessons learned, and address potential hazards before they lead to accidents. Safety meetings help reinforce a strong, positive safety culture and continuous improvement within the organisation.

Ultimately, they play a vital role in preventing errors, promoting best practices, and protecting both people and equipment.

The safety meetings held by Manchester Airport are detailed below.

2.2.14: a) Local Runway Safety Team

Aim	To ensure that an effective system is in place for considering and managing all aspects of runway safety risks at Manchester Airport.
Duty & Responsibilities	To reduce runway incursion/excursion risk to as low as reasonably practicable. To develop and progress runway safety initiatives through the Runway Safety Action Plan. To promote best practise about any activities within the runway environment including RTF standards. To review runway incursions/excursions, trends and lessons learnt. To continuously benchmark performance against EAPPRI/EAPPRE recommendations. To ensure a continuously strong focus remains on runway safety across all airport stakeholders.
Accountability	Airfield Operations Manager
Authority	The Airfield Operations Manager will seek guidance from the Aviation Safety Board (ASB), Operations Safety and Resilience Board (SRB) or Regulatory Authority if an issue falls outside their accountability.
Composition	Director of Aerodrome Operations (optional), Head of Aerodrome Compliance, Head of Airfield Operations, Head of Asset Engineering Operations, Airfield Planning representative, Head of Fire Service Manager, NATS representatives, Manchester based airline representatives.
Quorum	Airport: 3 persons, NATS: 1 person, Airlines: 3 different airlines
Performance	The LRST performance will be measured by the outcome of external audits (external bodies and regulatory authorities) and performance against set safety performance indicator targets.
Outputs	Any subjects that adversely affect the high-level risk profile, anything outside of risk appetite or anything that requires a change to organisational design and business planning needs are to be elevated to the Aviation Safety Board (ASB) or Operations Safety and Resilience Board (SRB). Continuous monitoring of runway safety standards and design of mitigation/reduction strategies where necessary. Implement policies and initiatives to ensure runway safety continuously improves and evolves relative to the operational output. Decisions on runway safety, policy, and compliance matters. Directives for safety actions to relevant committees / responsible post-holders.
Administrative Support	Minutes will be taken by the appropriate deputy.
TOR	Terms of reference are reviewed annually.
Frequency	4 times yearly.

2.2.14: b) Flight Operations Safety Committee (FLOPSC)

Aim	To review, discuss and agree policy and procedures for Flight Operations safety matters at Manchester Airport. Also, to act as information exchange on safety matters, current issues, and infrastructure developments with the aim of promoting safe and efficient operations.
Duty & Responsibilities	Review, discuss and agree policy on ATC and flight procedures at MA. Review of flight safety incidents, trends and lessons learnt. Report and discuss Airfield and apron safety issues. Promote awareness of and seek guidance on operational development and efficiency schemes
Accountability	Head of Aerodrome Compliance
Authority	The Head of Aerodrome Compliance will seek guidance from the Aviation Safety Board (ASB), Operations Safety and Resilience Board (SRB) or Regulatory Authority if an issue falls outside their accountability.
Composition	Head of Aerodrome Compliance, Head of Airfield Operations, Aerodrome Safety & Compliance Manager, Head of Asset Engineering, Airfield Planning representative, Airfield Operations Manager, NATS representatives, Manchester based airlines.
Quorum	Airport: 3 persons MAN Assets: 1 person. NATS: 1 person Airlines: 3 different airlines
Performance	The FLOPSC performance will be measured by the outcome of external audits (external bodies and regulatory authorities) and performance against set safety performance indicator targets.
Outputs	Any subjects that adversely affect the high-level risk profile, anything outside of risk appetite or anything that requires a change to organisational design and business planning needs are to be elevated to the Aviation Safety Board (ASB) or Operations Safety and Resilience Board (SRB). Continuous monitoring of flight safety standards and design of mitigation/reduction strategies where necessary. Implement policies and initiatives to ensure flight safety continuously improves and evolves relative to the operational output. Decisions on flight safety, policy, and compliance matters. Directives for safety actions to relevant committees / responsible post-holders.
Administrative Support	Minutes will be taken by the appropriate deputy.
TOR	Terms of reference are reviewed annually.
Frequency	4 times yearly.

2.2.14: c) Airfield Safety Strategy Group (ASSG)

Aim	A partnership involving airlines, airport operations and airside and baggage hall service partners to focus on ramp safety and champion continuous improvement.
Duty & Responsibilities	Promotion of good safety behaviors across the airfield through effective leadership. Promote awareness of airside safety and discuss new and on-going key safety issues and initiatives worldwide. Lead and encourage a proactive safety culture. Review airside policies and ASI's and make changes to support safety improvements on the airfield. Consult and plan for implementing regulatory changes or recommendations. Develop proposals for improvements to airfield facilities. Share best practice and lessons learned.
Accountability	Head of Airfield Operations
Authority	The Head of Airfield Operations will seek guidance from the Aviation Safety Board or regulatory authority if an issue falls outside their accountability.
Composition	Head of Aerodrome Compliance Head of Airfield Operations Airfield Operations Manager Aerodrome Safety & Compliance Manager Safety & Assurance Managers (Aerodrome) Health and Safety Business Partner Head of Motor Transport Airfield Assets/Engineering Representation Environmental Department Representation Senior Managers of all handling agents, catering, refuelling, and engineering companies.
Quorum	Four MA persons Four external senior managers
Performance	The ASSG will be measured against external attendance, contribution, and agreement on changes to airside safety policy.
Outputs	Minutes and actions. Promotional material and messages. Agreement on changes to airside safety policy. Information sharing amongst business partners.
Administrative Support	Minutes will be taken by the appropriate deputy
TOR	Terms of reference are reviewed annually.
Frequency	Bi-Monthly

2.2.14: d) Safety Performance Committee (SPC)

Aim	To review, discuss and examine solutions for safety matters and incidents, and determine recommendations to be taken to the Divisional Aviation Safety Board to improve levels of airside and aerodrome safety at Manchester Airport.
Duty & Responsibilities	Review and discuss safety incidents relating to airfield operations. Review and discuss weekly AOR and MOR data, emergency responses, procedural issues and final investigation. Identify and discuss safety trends and received reports on significant airfield incidents/performance and determine suitable action plans (e.g. policy changes) where required. Produce summary reports to the DAESEB based upon output from monthly report data. Set and agree actions which aim to continuously improve safety and benchmark safety performance against industry best practice. Review operational risk profile and track completion of agreed actions. Implement positive actions to counter any negative trends and track performance of measures implemented.
Accountability	Airfield Operations Manager
Authority	The Airfield Operations Manager will seek guidance from the Aviation Safety Board or regulatory authority if an issue falls outside their accountability.
Composition	Head of Compliance, Airfield Operations Manager, Airfield Operations Duty Manager, Aerodrome Safety & Compliance Manager, ASCO representative, Health & Safety Business Partner, Senior Airfield Engineer, MA RFFS Representation, NATS Representation Business Continuity and Resilience Manager
Quorum	Five persons
Performance	The SPC's performance will be measured by the outcome of internal and external audits, investigations, safety promotion and performance against set safety performance indicator targets and ground service licence.
Outputs	Bi-monthly Safety Performance Committee minutes to be distributed to appropriate parties. Proposals and actions to address safety trends and determine action plans e.g. changes to operating policies or airfield infrastructure. Summary reports when required. Any subjects that adversely affect the high-level risk profile, anything outside of risk appetite or anything that requires a change to organisational design and business planning needs are to be elevated to the Aviation Safety Board and/or ANS Management Committee. Continuous monitoring of safety performance trends against reported 13-month historical data. Implement policies and initiatives to ensure continuous improvement of airfield and air navigation safety standards. Any identified changes to Local Operating Procedures (LOPs) are consulted upon and actions agreed.
Administrative Support	Minutes will be taken by the appropriate deputy
TOR	Terms of reference are reviewed annually.
Frequency	Fortnightly

2.2.14: e) Aviation Safety Board (ASB)

Aim	To oversee compliance with regulatory safety requirements, including the Aerodrome Certificate and MAG's internal safety objectives. To endorse policy on matters relating to airfield safety management.
Duty and Responsibilities	Set and agree actions which aim to continuously improve safety and benchmark safety performance against industry best practice. Review compliance with regulatory standards and internal policy. Discuss received reports on significant airfield incidents and performance where a policy change may be required. Assess regulatory changes and ensure implementation to systems and procedures. Ensure application of local, group and industry learning. Review operational risk profile and track completion of agreed actions.
Accountability	Director of Aerodrome Operations
Authority	The Director of Aerodrome Operations will seek guidance from the Operations Safety and Resilience Board (SRB) or regulatory authority if an issue falls outside their accountability.
Composition	Director of Aerodrome Operations, Aerodrome Safety & Compliance Manager, Head of Aerodrome Compliance, Head of Airfield Operations, Airfield Operations Manager, Asset Maintenance Director and or representation from the Asset Maintenance Team, Head of Fire Service, General Manager NATS, Health & Safety Business Partner, Ground Handling Manager, Aerodrome Technical Safeguarding Manager, Head of Engineering & Baggage Operations, Senior Engineering Manager, Airfield Security Operations Manager, Business Continuity & Resilience Manager, Fire & Operations Training Manager .
Quorum	Four persons.
Performance	The ASB's performance will be measured by the outcome of external audits (external bodies and regulatory authorities) and performance against set safety performance indicator targets.
Outputs	Any subjects that adversely affect the high-level risk profile, anything outside of risk appetite or anything that requires a change to organisational design and business planning needs are to be elevated to the Operations Safety and Resilience Board (SRB). Continuous monitoring of SPIs against set targets and design of mitigation/reduction strategies where necessary. Implement policies and initiatives to ensure SMS continuously improves and evolves relative to the operational output. Decisions on airfield safety, policy, and compliance matters. Directives for safety actions to relevant committees / responsible post-holders.
Administrative Support	Minutes will be taken by appropriate deputy.
TOR	Terms of reference are reviewed annually.
Frequency	Monthly

2.2.14: f) Safety and Resilience Board (SRB)

Aim	To oversee health and safety, aviation safety, fire safety, resilience and compliance performance, to ensure that risks are effectively managed and statutory duties are met. Consult upon, review and make recommendations to change policy, strategy, standards, process, objectives and targets with regard to the above mentioned areas.
Duty and Responsibilities	To monitor and determine action to improve airport safety performance and risk profile through the review of KPI data, and analysis of emerging trends and risk. Identifying and mitigating potential risks through the review of incident reports and determine significant changes to the management system.
Accountability	Managing Director
Authority	Chief Operating Officer
Composition	Managing Director (Accountable Person) Chief Operating Officer (Responsible Person) Director of Aerodrome Operations All other Departmental Directors or Heads of, if not held by a Director Head of Health and Safety Head of Operational Resilience Health and Safety Business Partner (As required) Principal Fire Safety Manager (As required)
Quorum	To be determined by the chairperson
Performance	Performance will be monitored by reviewing KPI data and analysis of emerging trends, and risk.
Outputs	To provide strategic direction, objectives and targets, Direct changes to organisational arrangements and priorities, Prioritise actions to address performance issues, key risks, emerging trends, audit actions and compliance issues, Provide endorsement and support for new/existing initiatives to improve the safety culture, Escalate risks to Group Safety & Risk Board (GSRB) if unable to resolve or the action completion date is one month overdue, Review the progress of the strategy action plans and support the delivery of the strategy, Make recommendations to review and change policies, standards, processes with regards to health and safety.
Administrative Support	Meeting minutes will be taken by an appropriate person appointed by the chairperson, with minutes and actions circulated to members in a timely manner.
TOR	Terms of reference are reviewed annually.
Frequency	Monthly

2.2.14: g) Safety Committee Attendance

It is mandatory for post holders with aerodrome safety responsibilities to attend and contribute to formal safety related committees as detailed in the Safety Committee matrix.

Airfield Operations will review attendance by the detailed post holders at Safety Committees detailed within the matrix on an annual basis.

i Safety Interfaces and Stakeholders

As a large airport community, it is not only Airfield Operations who have responsibility for safety. The operation of an aerodrome that handles upwards of 700 movements per day requires activities to be outsourced, some of which have large amounts of safety responsibility (e.g., Air Traffic Control). This section outlines the management of such interfaces and stakeholders.

Post	Safety Committee					
	LRST	FLOPSC	ASSG	SPC	ASB	SRB
Managing Director						✓
Chief Operating Officer						✓
Director of Aerodrome Operations	✓				✓	✓
Head of Aerodrome Compliance	✓	✓	✓	✓	✓	
Head of Airfield Operations	✓	✓	✓		✓	
Head of Health and Safety						✓
Head of Fire Services	✓				✓	✓
Head of Asset Engineering		✓			✓	
Aerodrome Safety and Compliance Manager		✓	✓	✓	✓	
Airfield Operations Manager		✓	✓	✓		
Airfield Operations Duty Manager (AODM)				✓		
ASCO Representation				✓		
Health and Safety Business Partner			✓	✓	✓	✓
RFFS Representation	✓			✓	✓	
General Manager NATS/ATC				✓	✓	
NATS Representation	✓	✓		✓		
Ground Handling Manager					✓	
Safety and Assurance Manager						
Asset Engineering Operations Representative			✓		✓	
Aerodrome Technical Safeguarding Manager					✓	
Head of Engineering and Baggage Operations					✓	
Airfield Security Operations Manager					✓	
Business Continuity and Resilience Manager				✓	✓	
Head of Motor Transport			✓			
Environmental Department Representation			✓			
Senior Managers of Ground Handling Companies			✓			
Airfield Planning Representative	✓	✓				
Representation of MAN Based Airlines	✓	✓				

ii National Air Traffic Services (NATS)

NATS are the contracted ATS provider for Manchester Airport and as such have a crucial role in the operational safety of the airfield. To ensure a regular closely integrated communication link between MA and NATS, two meetings take place at different levels within both organisations.

A bi-monthly MA-NATS Safety Performance Committee (SPC) takes place, involving members of the day-to-day management teams from both organisations. It is designed as an information sharing forum using information gathered from the previous week's operations and aims to ensure immediate safety concerns can be addressed and learnt from.

A higher level ATS Management Committee takes place every two months and is attended by senior management from both organisations. This is a more strategic review of the contract performance between NATS and MA and includes safety matters together with strategic developments for ATS operations at Manchester Airport, including ongoing review of the Unit Safety Plan.

iii Civil Aviation Authority (CAA)

As our Competent Authority, the CAA has a major influence on the management of safety for Manchester Airport. Whilst there are many rules and regulations that must be followed, the relationship between Manchester Airport and the CAA ensures that both parties are fully aware of any changes that are planned, and that safety is always considered thoroughly.

iv External Emergency Services

The Head of Business Continuity & Resilience holds the relationship between MA and the External Emergency Services relating to Emergency Response Planning.

v Service Partners

Service Partners: including airlines, handling agents, and other companies that operate airside at MA contribute approximately 90% of those persons working and present on the airfield. The primary method in which MA communicates with service partners is through the Airfield Safety Strategy Group. The day-to-day relationship between MA and service partners is through the Airfield Operations Centre and at a management level through the audit process and through other communication channels such as the safety documentation that is sent out from Airfield Operations, Safety and Compliance.

2.2.14: h) Other MA Departments

i Environment

Whilst this SMS fully supports the environmental policies in place at the airport, there may be times when safety takes a priority over environmental concerns. Regular communication with the environment department ensures that should the need arise; all parties can work well together to ensure that any damage to the environment is limited as far as possible.

ii Asset Management/Capital Delivery

Development work and major maintenance that takes place on the airfield is planned jointly between the Airfield Technical Planning & Safeguarding Team and Capital Delivery. It is crucial that the expertise from both areas is aligned correctly to ensure that any works that take place are done so in a safe manner. A good working relationship between MAG Projects and their contractors is managed through documented general requirements and contract documents that provide for safety considerations.

iii Asset Engineering Operations

Maintenance of infrastructure and procedures aligned with safety requirements.

iv Airside Coaching

Provision of airside coaching for the movement of passengers in emergency situations as detailed within the Manchester Airport Emergency Response Manual .

2.2.15 Safety Training & Education

The Manchester Airport site has approximately 20,000 staff, most of who work for third party companies. However, MA has a duty to operate a safe airfield and therefore takes on a responsibility to ensure those who work on the airfield understand the risks and hazards involved.

Training & Education is split into two distinct parts, although there is some overlap in certain circumstances i.e., safety inductions for all new staff be they employed directly by MA or by third party company.

2.2.15: a) Manchester Airport Staff

The training and education of MA staff is supported by Competency Frameworks in place throughout all operational areas (Aerodrome Safety & Compliance, Airfield Operations, and Asset Management). Such documents are owned by each area Head and can be accessed at any time by authorised persons on request.

The competency frameworks include not only basic safety training, but also specific training relating to individual roles. They also assess non-operational roles (i.e., management positions) to ensure that suitable and qualified persons are employed in safety critical roles.

2.2.15: b) Third Party Company Staff

The training and education of third-party company staff is the responsibility of the company itself but is supported by MA where possible. As stated above, there are certain elements where MA dictates requirements; examples being Airside Driver Training and Airside Safety Induction Training.

The main way in which training and education is monitored by MA is with an audit system. . This ensures that each third-party company reaches certain generic standards relating to safety, allowing MA to be confident that said company is safe to operate on the Manchester Airport site.

In addition, safety targets are contained in the Ground Handling Licences applicable to key airside operating Companies.

2.2.15: c) External Groups

To ensure that a wider industry perspective is taken into consideration, MA Operations maintain involvement in a variety of external groups focussed on operational safety. A valuable exchange of safety information and learning is achieved through these groups and contributes to further improvements to policies and procedures at Manchester and the MAG airports. A selection of these groups includes:

- Airport Operations, Safety & Compliance Committee
- Airports Council International – Technical Operations and Safety Committee
- UK Flight Safety Committee
- Northwest Local Airspace Infringement Team
- UK Wildlife Hazard Management Forum
- Combined Aerodrome Safeguarding Team (CAST)

2.2.15: d) Human Factors

There are many ways in which human interaction can have an impact on safety. A dedicated training programme on Human Factors is offered to all key aerodrome post holders with operational safety responsibilities. This involves most managers within Operations.

2.3 Compliance Monitoring

Compliance monitoring of operational activities is an important part of the SMS and is essential to ensuring Safety Performance Monitoring and Measurement.

MA's compliance monitoring is organised and governed at three levels.

- Level 1 Aerodrome Safety & Compliance
- Level 2 Compliance & Assurance (independent of operational functions and personnel)
- Level 3 MAG Risk & Assurance

2.3.1: a) Compliance Monitoring Categories

The compliance monitoring process is divided into 4 categories:

- Internal Compliance Monitoring
- Regulatory Compliance Monitoring
- External (Third Party/Contracted) Compliance Monitoring
- Risk Based Compliance Monitoring

Where the competence to complete compliance monitoring is held internally, MA and/or MAG staff carry out compliance monitoring. When the subject area is too specific to have a specifically trained member of internal staff, external companies are used. The following procedure gives an outline of the compliance monitoring system currently in place at Manchester Airport.

i Internal Compliance Monitoring

Audit Level	Audit Area	Brief Description	Auditor	Min Audit Frequency
Level 3	MAG Internal departments and operational areas	Internal and regulatory compliance	MAG Risk and assurance	Performance and risk based

ii Regulatory Compliance Monitoring

Audit Level	Audit Area	Brief Description	Auditor	Minimum Audit Frequency
Level 2	AMC Organisation Requirements for Aerodromes	Internal compliance against requirements Part.ADR.OR Subparts A to E	Aerodrome Safety & Compliance Safety and Assurance Manager	Three Yearly Cycle
Level 1	AMC Organisation Requirements for Operations	Internal compliance against requirements Part.ADR.OPS Subparts A to C	Aerodrome Safety & Compliance Safety and Assurance Manager	Three Yearly Cycle

iii External (Third Party/Contracted) Compliance Monitoring

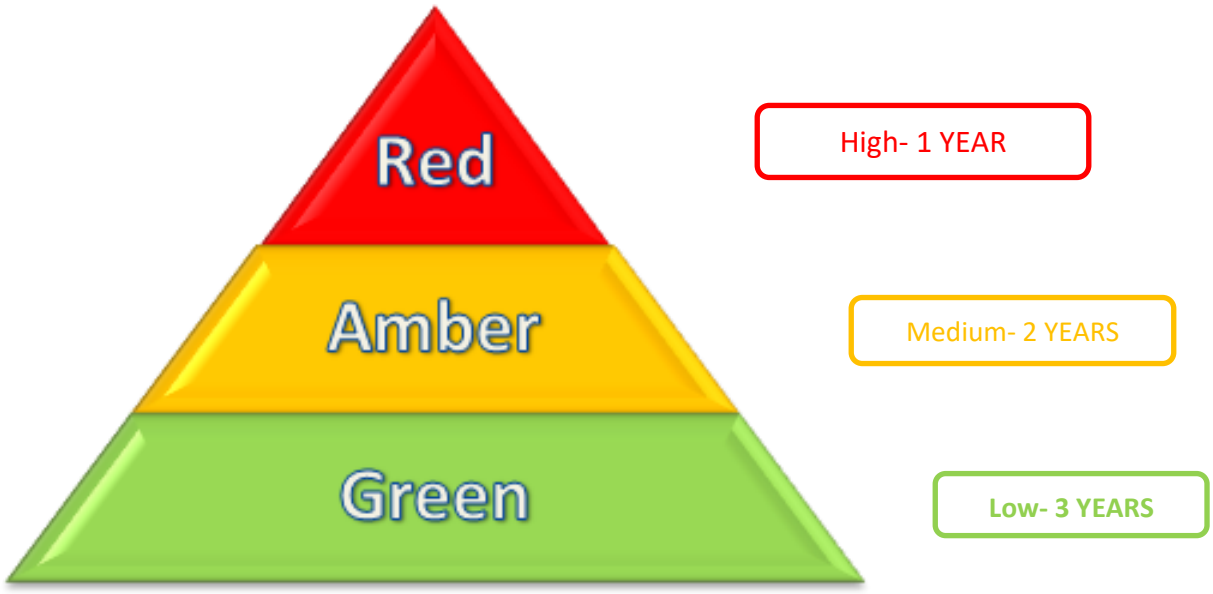
Audit Level	Audit Area	Brief Description	Auditor	Minimum Audit Frequency
Level 1	Fuel Management	Compliance for companies who store aviation fuel or have responsibilities for "into plane fuelling".	External	Bi-Annually per service partner
Level 1	Aircraft De-Icing	To assess Service Partners' compliance with MA airside operational requirements.	External	Bi-Annually per service partner
Level 1	Service Partner	To assess Service Partners' compliance with MA airside operational requirements, ASI's, Ground Service Licence and self-certification for airbridge operations and airside driving.	Aerodrome Safety & Compliance Safety and Assurance Manager	Performance & Risk based
Level 1	Aircraft Turnround	To assess Service Partners' compliance with CAP 642 and Local Airfield Instructions.	Airfield Operations	Daily
Level 1	Self-Certification (Operators Vehicle Maintenance Standards)	To assess the Operators' compliance with CAP 642 and MA requirements on airside vehicle standards.	Aerodrome Safety & Compliance Safety and Assurance Manager	Performance & Risk based
Level 1	Ramp Vehicle Inspection	Spot-check process to monitor compliance with CAP 642 Vehicle standards.	Aerodrome Safety & Compliance Safety and Assurance Manager	Monthly

2.3.1: b) Risk Based Compliance Monitoring

To assist with ensuring the Manchester Airport operational risk profile is accurate and continually updated, the Aerodrome Safety and Compliance Manager will issue compliance monitoring requests to the Aerodrome Safety Compliance team.

This is to ensure the performance/adequacy of risk barriers are monitored and outcomes are inputted back into the operational risk management profile.

i Third Party/Contracted Activity Complexity Triangle



ii Third Party/Contracted organisation's Activity rating

Performance based audits are conducted on those companies with staff having access airside, in particular staff who have access to the apron area and may come into proximity to vehicles or aircraft. These audits will cover airside operational activities that the audited company is self-certified for e.g., Airbridge Operations and Airside Driving to ensure compliance with MA requirements.

The audit will check for compliance with the requirements of Manchester Airports Safety Management System (SMS). Any non-compliance is brought to the attention of the Service Partner and actions with timescales are agreed.

The audit outcomes will be recorded on an Operational Compliance Audit Report which will then be filed and maintained for a period of 2 years.

Performance based audits can also be carried out as a 'Desktop' audit from a location away from the company being audited using electronic communications. 'Desktop' audits provide a level of safety assurance and compliance with MA requirements by the information and documentation requested by and submitted to the Auditor.

Analytical information will determine the level of oversight before being categorised against the Complexity Triangle according to risk and performance RED (High), AMBER (Medium), or GREEN (Low).

The Complexity Triangle will determine the initial oversight required in proportion to the organisations operational complexity and be continually evaluated and reassessed to determine further categorisation if required.

Determination of the level of oversight assurance will be agreed by the Aerodrome Safety & Compliance Team.

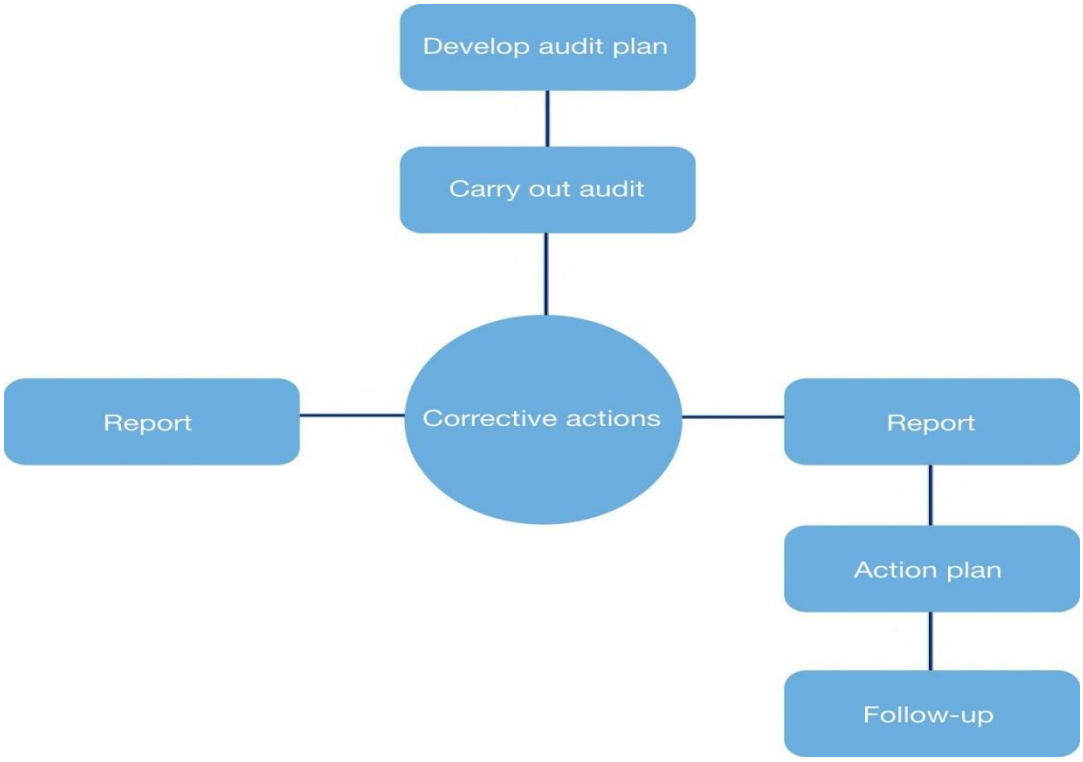
2.3.1: c) Compliance Monitoring Schedule

A Safety Management Compliance Monitoring Schedule for MA Internal Departments and 3rd Party / contractors programmes audits over a 36-month (3 year) period.

The Aerodrome Safety & Compliance Manager is responsible for the Safety Audit Schedule. The internal and external annual audit schedules will be subject to approval by the Director of Aerodrome Operations (Accountable Manager).

Whilst the matrix sets out the preferred audit schedule, changes to the matrix will be made to facilitate the audit process when necessary.

2.3.1: d) Compliance Monitoring Process



The Safety Audit process is a robust system incorporating:

- **Communication of intent to audit** – contact is made by the Aerodrome Safety & Compliance team to the organisation / department concerned informing them of the upcoming audit date and time.
- **Audit** – an audit is carried out by Aerodrome Safety & Compliance by one or more of the Audit Team.
- **Audit write-up & issue of action plan** – post-audit, the findings are written into a report, along with an expectation of the actions to be carried out by the audited organisation. The timescales given for actions to be implemented are based upon the severity of any safety concerns.
- **Check and review of action plan** – the action plan is monitored and followed up to ensure that all safety concerns have been addressed.

Depending upon the type of audit the above Safety Audit structure can be altered. For example, for daily aircraft turnround audits it is not feasible to write a letter of intent and individual action plan for each company at each audit. What is more reasonable is to highlight any major concerns immediately but then build up a case of improvements that need to be made and deliver them during the Service Partner audit.

All audits will be carried out in confidence, the results of Internal or External audits will remain confidential to those companies or departments having been audited, the results of the audit including any non-compliance with the agreed actions and timescales will be discussed at the audit out brief.

All reported non-compliances should be dealt with using the best endeavours of the company having been audited, any delay on agreed actions and time scales could; however, result in the audit being referred to the Aerodrome Safety & Compliance Manager, persistent non-compliances by individual companies will be monitored by the Aerodrome Safety & Compliance Team and brought to the attention of the Director of Aerodrome Operations .

2.3.1: e) Non-compliance Categorisation

Each Audit finding is categorised as **RED, AMBER** or **GREEN** requiring a response within an agreed period.

- **RED** Non-Compliance - Response required in 7 days.
- **AMBER** Requires attention/observation – Response required in 28 days.
- **GREEN** Compliant

2.3.1: f) Audit Outcomes

All non-compliances resulting from the Audit Reports will be discussed at the Safety Performance Committee (SPC) and Aviation Safety Board (ASB).

2.4 Quality Management System for aeronautical data and aeronautical information provision.

Please see ADQ Manual EGCC-M-AOPS-010 for a description of how we oversee the quality of aeronautical data.

2.5 Reporting to UK CAA

Airside Standing Instruction EGCC-I-AOPS-009 sets out the policy and procedures for the reporting of accidents, incidents and safety occurrences to the UK CAA.

2.6 Alcohol, psychoactive substances, and medicines.

2.6.1 Scope

Being under the influence of alcohol or drugs can seriously impair an individual's judgement and reactions leading to an increased risk of accidents and injuries occurring.

Manchester Airport Groups Substance misuse and dependency Standard (available to all MAG employees via Magnet Policy Hub) sets out the rules regarding the consumption of alcohol, drugs, and illegal substances for all MAG employees. MAG employees encompass all contractors and agency workers, regardless of their job function, during working hours or whilst representing the company in connection with their duties. It will:-

- Help protect employees from the dangers of drug, alcohol and illicit substance misuse and encourage those with a dependency to seek help.
- Ensure that employees' use of drugs, alcohol or illicit substances does not impair the safe and efficient running of the business, or compromise the safety of customers, passengers, and employees.
- Enhance MAGs reputation as a safe and responsible employer.
- Comply with all relevant legislation.

Responsibility for decisions relating to "with cause" and "post-accident/ incident" testing lies with departmental managers in-line with the process set out in the Group Standard.

2.6.2 Non-MAG Airside Users

Any commercial operator who has access to airside must submit their equivalent alcohol, psychoactive substances, and medicines policy as part of their application for an Airport's Operators License. This is done on initial or renewal of their application through the Airdat onboarding process and is monitored by MAG.

Responsibility for decisions relating to "with cause" and "post-accident/ incident" testing lies with the commercial operator's duty management in-line with their company's process.

2.7 Other Procedures

2.7.1 Safety Directives

Safety Directives, issued by the Competent Authority, will be reviewed where appropriate by the relevant line managers and the Aviation Safety Board. Should any change be required as a result, this will be assessed under the MAN Change Management process.

Any changes or recommendations will be made to the relevant safety committee.

2.7.2 Safety Problems

Any safety issue will be assessed by the relevant safety committee as per the terms of reference listed in this document. The Aviation Safety Board will delegate any actions to the relevant safety committee for discussion and to assess potential mitigations and solutions.

Recommendations will then be proposed to the Aviation Safety Board for approval.

2.7.3 Safety Recommendations

Safety recommendations, whether internal or external, will be discussed by the Aviation Safety Board and actions and recommendations issued as per section 2.7.2.

2.8 Recording of Aircraft Movements and Passenger Numbers

The recording of aircraft movements at the Airport is the responsibility of Airfield Control. A basic schedule of movements is provided by aircraft operators and airliners to Airport Co-ordination Ltd (ACL). The schedule is updated on a continual basis, either electronically or directly, with the Airfield Control department updating information such as aircraft registrations or arrival times.

All information relating to the movement of arriving and departing aircraft are recorded in the CHROMA database. The database is also used to record towing movements and other operational information.

2.9 Contracted Activities

When MA contracts any part of its activity to an organisation that is not itself certified in accordance with regulation to carry out such activity, the contracted organisation shall work under the approval

and oversight of MA. MA shall ensure that the CAA is given access to the contracted organisation, to determine continued compliance with the applicable requirements.

2.9.1 ILS Inspections

ILS flight inspections take place every six months on the ILS equipped runways. A licensed contractor carries out this function.

2.9.2 Aerodrome Survey Data and Treatment of Obstacles

CAP 1732 sets out the required specification for aerodrome topographical and obstacle limitations surveys. Manchester Airport will procure these under contract with a CAA approved provider.

2.9.3 The Management of Air Traffic

The management of Air Traffic within the Manchester Airport CTR, and Radar control of associated IFR Air Traffic outside the CTR, are contracted to NATS. NATS carry out their responsibilities in accordance with the standards in CAP 1732, The Manual of Air Traffic Services (MATS) Part 1 and CAP 670, ATS Safety Requirements.

Details of the Air Traffic Services provided, and local procedures are contained in the Manchester MATS Part 2.

2.9.4 Aeronautical Ground Lighting

ATG provide Manchester Airport with expertise in maintaining the software for the AGL system.

2.9.5 Navigation Aids

Navigational Aids are operated in accordance with MATS Part 2, in compliance with CAP 670. The equipment is maintained in accordance with the NATS Management System where NATS has been delegated Engineering Authority.

In the case of the Surface Movement Radar, Manchester Airport Group contract directly with a maintenance provider, who coordinates requirements in consultation with NATS Engineers.

2.9.6 Ground Handling Agents

Ground Handling Agents are not directly contracted by the Airport Authority. Such activities are the subject of contractual agreements between Airlines and Ground Handling Agents. However, Ground Handling Agents are required to obtain and comply with a Ground Handling License from the Airport Authority for them to operate within the Aerodrome environment. Ground Handling Agents are required to comply with the contents of the Aerodrome Manual including ASI's and expected to undertake their operations in accordance with the IATA Ground Operations Manual.

Section 3 Required aerodrome personnel qualifications.

3.1.1 The training programme – Responsibilities, Frequencies, Syllabi and Training Standards .

3.1.1: a) Introduction

It is the responsibility of every company working airside to ensure all staff are adequately. trained, both prior to initial performance of duties and recurrently as necessary. This training must be delivered by trained and competent trainers and assessors as detailed in paragraph 3.1.2.

MAN ensures that personnel are aware of the rules and procedures relevant to operation of the aerodrome and the relationship of their duties and safety responsibilities to the aerodrome operation. This is delegated to individual departments and operators with responsibility for their own personnel.

3.1.1: b) Training Programme

The training programme is split into 2 main categories:

- Personnel operating unescorted on the movement area, and other operational areas of the aerodrome, and which are related to the aerodrome operator, or other organisations which operate or provide services at the aerodrome regardless of their level in the organisation.
- Personnel involved in the Operations, Maintenance and Management of the Aerodrome. This includes supervisors, managers, senior managers, and the accountable manager.

All department managers and operators within the scope of the above 2 categories are required to have training programmes in place for all relevant personnel. This programme should incorporate all relevant regulatory, MAN and internal requirements.
The training programme should consist of the following:

- a process to identify training standards, including syllabi, and frequency for each type of
- training and area of activity for the people, including for
- instructors and assessors detailed in paragraph 3.1.1 (c), and track completion of required training.
- a validation process that measures the effectiveness of training.
- initial job-specific training.
- on-the-job training; and
- recurrent training.

The training programme should identify training responsibilities and contain procedures for training and checking of the trainees, this should be applied if personnel do not achieve or maintain the required standards.

The frequency of training for each area or activity should be included within the training programme and should be reflected in individual training records.

The method of assessing the effectiveness of training should be recorded in the training programme.

The training programme should incorporate safety management system training, Human Factors and Organisation Factors Training appropriate to the individual responsibility.

3.1.1: c) Instructors and Assessors

All operators must ensure they have adequately qualified and competent instructors and assessors for the implementation of the training programme used. Training and competency programmes should be provided to ensure that instructors and assessors gain and maintain competency in all areas within the remit of their training. This applies to all activities within the scope of the operation for each operator or department.

Further guidance on the requirements for instructors and assessors can be found in UK REG (EU) 139/2014.

3.1.2 Procedures for:

3.1.2: a) The training and checking of the trainees.

Checking required for each training course should be accomplished by the method appropriate to the training element to be checked. Examples include practical checks, multiple choice exams, written assessments etc.

Training elements that require individual practical participation may be combined with practical checks. These will be detailed in departmental or operator training programmes as relevant.

A process should also be implemented to track the completion of training both prior to an individual commencing their role unescorted, and on an ongoing basis as required.

3.1.2: b) Maintenance of Competency

Maintenance of competency should be recorded every 30 days to ensure continued competency of personnel and that personnel are aware of the rules and procedures relevant to their duties and responsibilities.

All managers are responsible for ensuring anyone returning following a period of absence, or who fail to maintain competency complete the required Refresher Programmes, this is mandatory, and subject to audit per MAN's Ground Handling licence:

- 30 to 89 days: A Short-Term Refresher Programme is to be completed.
- 90 -179 days: A Long-Term Refresher Programme is to be completed.
- 180+ days: A Long-Term Refresher Programme is to be completed and individuals must re apply for Airside Driving permits.

3.1.2: c) Failure to meet the required standards.

i Remedial Action

Procedures for managing personnel who fail to reach or maintain the required standards should be detailed in the operator or department documentation. Where appropriate or deemed necessary, individuals failing to maintain the required standards may be subject to the Company's Disciplinary Procedures.

3.1.3 Training Records

A training file should be developed for each employee, including management, to assist in identifying and tracking employee training requirements, and verifying that personnel have received the planned training.

MAN ensures that records are in place to record the following information for each person, and that these are always kept up to date. This responsibility is delegated to individual operators as relevant.

- starting date of employment/ending date of employment (if applicable)
- area of activity
- previous working experience
- qualifications
- training (before entry and subsequent)
- proficiency checks, including language proficiency as appropriate

Requirements for the recording and storage of documents are detailed in Section 2.2.4 of the Aerodrome Manual.

The training record is to be made available to personnel on request and to any new employer where relevant, within the guidelines of the General Data Protections Regulation.

If no training record transferred, or no record of training is available, the training must be undertaken again to ensure competence.

3.1.3: a) Personnel involved in the Operations, Maintenance and Management of the Aerodrome.

MAN is required to have a training programme in place which covers all personnel involved in the Operations, Maintenance and Management of the Aerodrome. MAN defines this as Air Traffic Control, Airfield Operations, RFFS and Airfield Ground Lighting / Air Traffic Engineering and incorporates all levels of responsibility. This also applies to nominated persons and roles listed within CAP 700.

Each of these areas have competency frameworks for all personnel as defined above, these are available from the individual departments.

MAN has a system in place to ensure that the key competencies listed in CAA CAP700 are covered by designated and competent personnel. This is documented in separate CAA CAP700 documentation.

Each of the above areas should nominate instructors and assessors to be used for the implementation of the training and proficiency check programmes. The personnel to be nominated may also include contracted instructors for individual subjects.

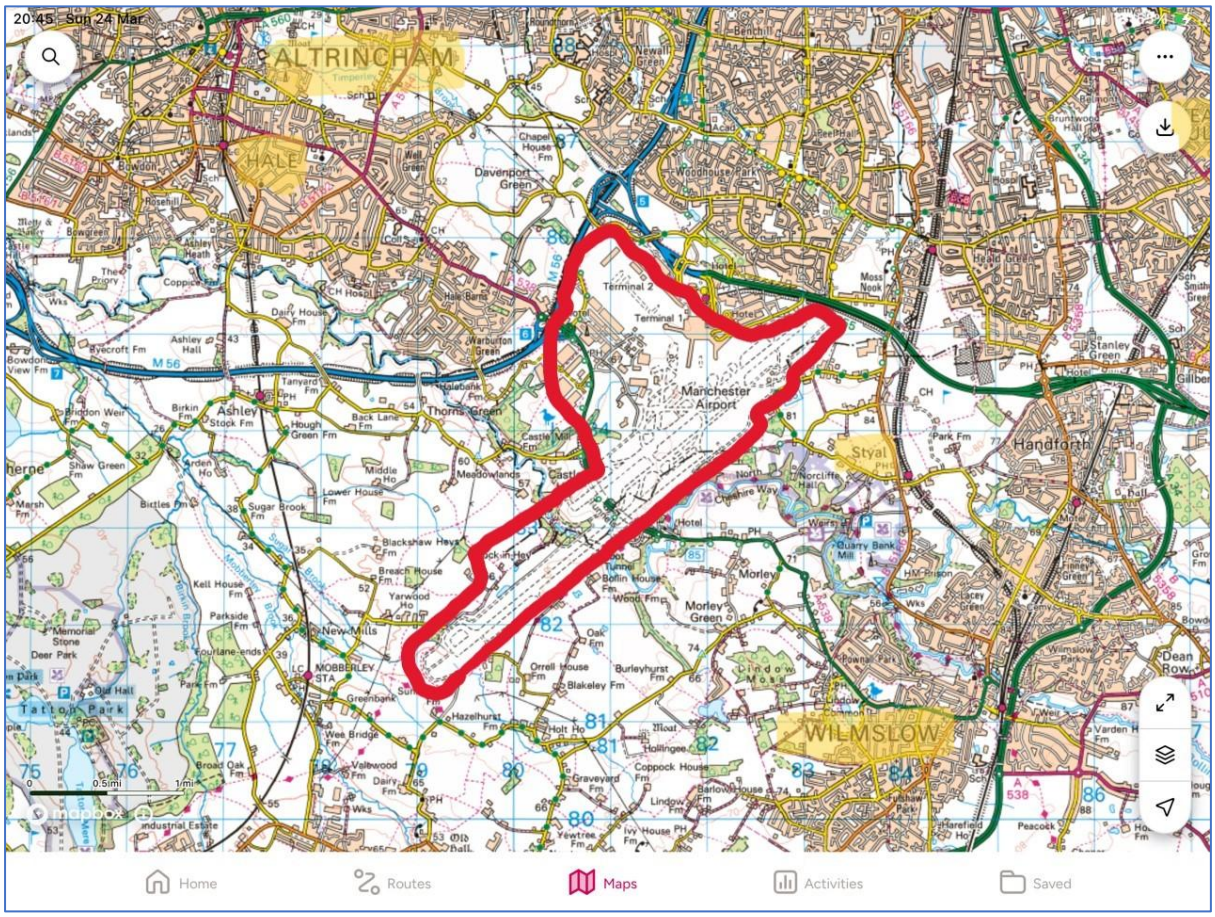
Each of the above areas should ensure training records are in place.

Part C – Particulars of Aerodrome Site

Note: Information in Part C must not be used for operational or flight planning purposes.

Section 4 Aerodrome Description

4.1 Distance of the aerodrome from the nearest city, town, or other populus area.



Distance and Bearing from Aerodrome Reference Point:

Name	Bearing	Distance
Styal	110˚	1.0NM
Hale Barns	300˚	1.8NM
Wilmslow	140˚	2.4NM
Altrincham	310˚	3.25NM
Stockport	050˚	5.25NM

4.2 Aerodrome Map

The below map/s detail the location (longitude and latitude) of the aerodrome, boundaries, major facilities, reference points, layout of runways, taxiways, aprons, visual/non-visual aids, and wind direction indicators.

AERODROME CHART - ICAO

532113N 0021630W

ELEV 257FT

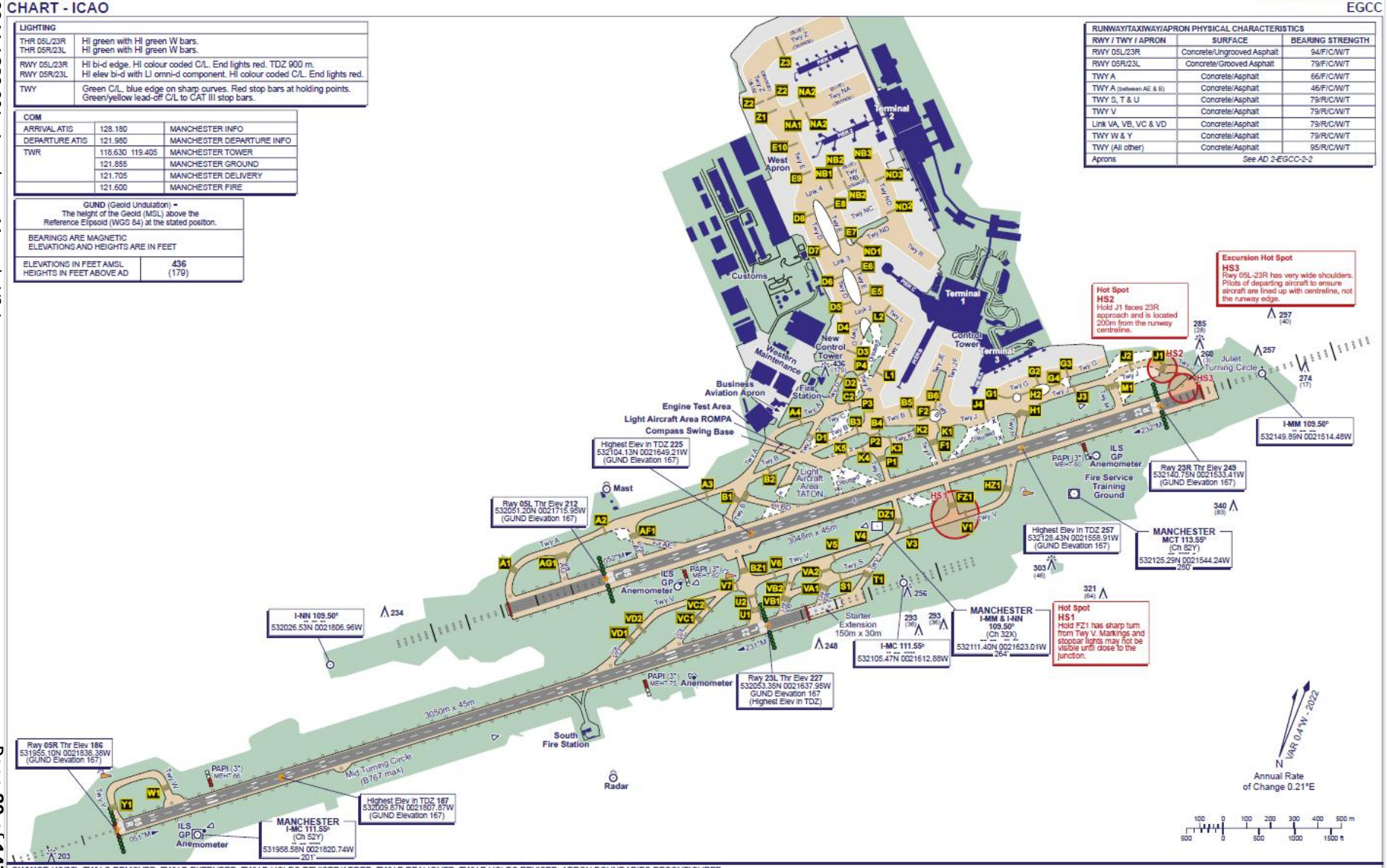
MANCHESTER
EGCC

LIGHTING	
THR 05L/23R THR 05R/23L	HI green with HI green W bars. HI green with HI green W bars.
RWY 05L/23R RWY 05R/23L	HI bi-d edge. HI colour coded C/L. End lights red. TDZ 900 m. HI elev bi-d with LI omni-d component. HI colour coded C/L. End lights red.
TWY	Green C/L, blue edge on sharp curves. Red stop bars at holding points. Green/yellow lead-off C/L to CAT III stop bars.

COM		
ARRIVAL ATIS	128.180	MANCHESTER INFO
DEPARTURE ATIS	121.980	MANCHESTER DEPARTURE INFO
TWR	118.630 119.405	MANCHESTER TOWER
	121.855	MANCHESTER GROUND
	121.705	MANCHESTER DELIVERY
	121.600	MANCHESTER FIRE

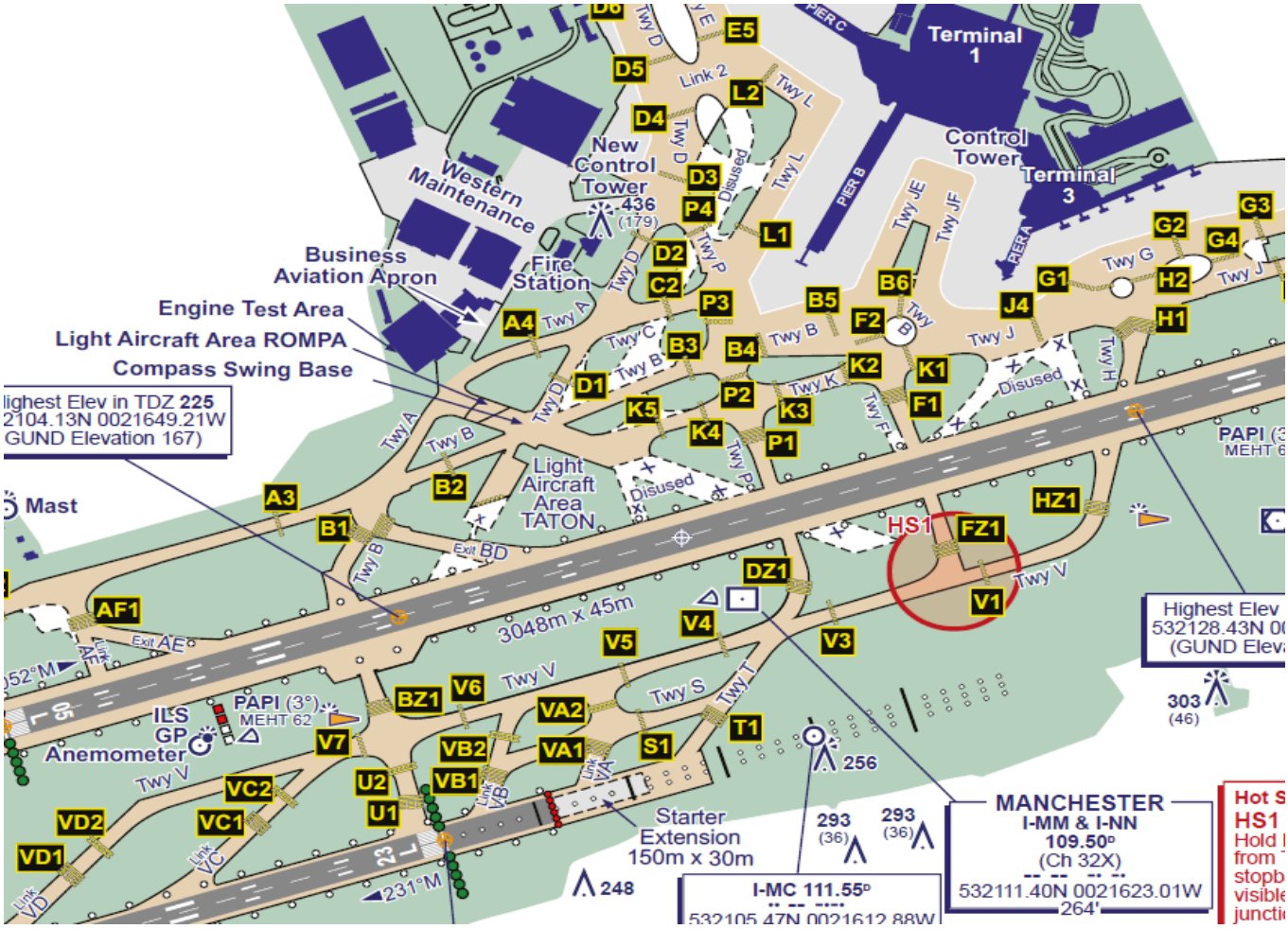
GUND (Geoid Undulation) = The height of the Geoid (MSL) above the Reference Ellipsoid (WGS 84) at the stated position.	
BEARINGS ARE MAGNETIC ELEVATIONS AND HEIGHTS ARE IN FEET	
ELEVATIONS IN FEET AMSL HEIGHTS IN FEET ABOVE AD	436 (179)

RUNWAY/TAXIWAY/APRON PHYSICAL CHARACTERISTICS		
RWY / TWY / APRON	SURFACE	BEARING STRENGTH
RWY 05L/23R	Concrete/Ungrooved Asphalt	94/F/C/W/T
RWY 05R/23L	Concrete/Grooved Asphalt	79/F/C/W/T
TWY A	Concrete/Asphalt	66/F/C/W/T
TWY A (between AE & B)	Concrete/Asphalt	46/F/C/W/T
TWY S, T & U	Concrete/Asphalt	79/R/C/W/T
TWY V	Concrete/Asphalt	79/R/C/W/T
Link VA, VB, VC & VD	Concrete/Asphalt	79/R/C/W/T
TWY W & Y	Concrete/Asphalt	79/R/C/W/T
TWY (All other)	Concrete/Asphalt	95/R/C/W/T
Aprons	See AD 2-EGCC-2-2	

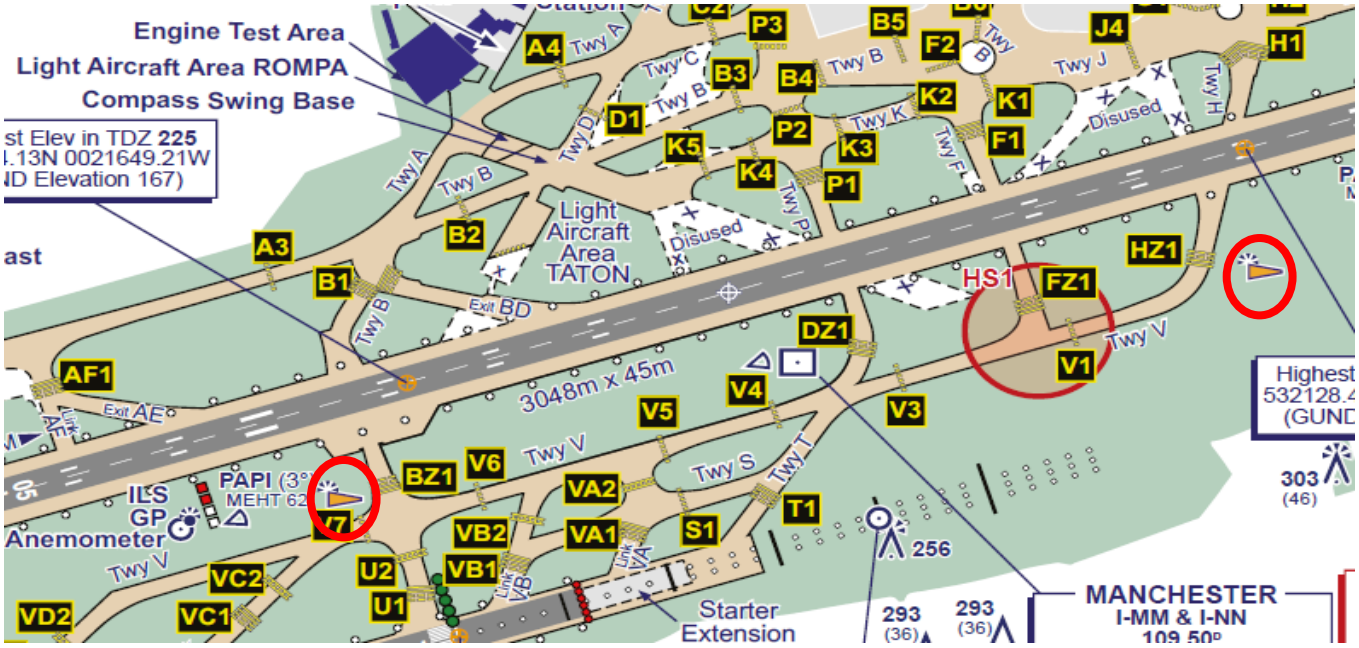


CHANGE (12/25): TWY Q REMOVED. TWY D EXTENDED. TWY D HOLDS REVISED/ADDED. TWY E REALIGNED. TWY E HOLDS REVISED. APRON BOUNDARIES RECONFIGURED.

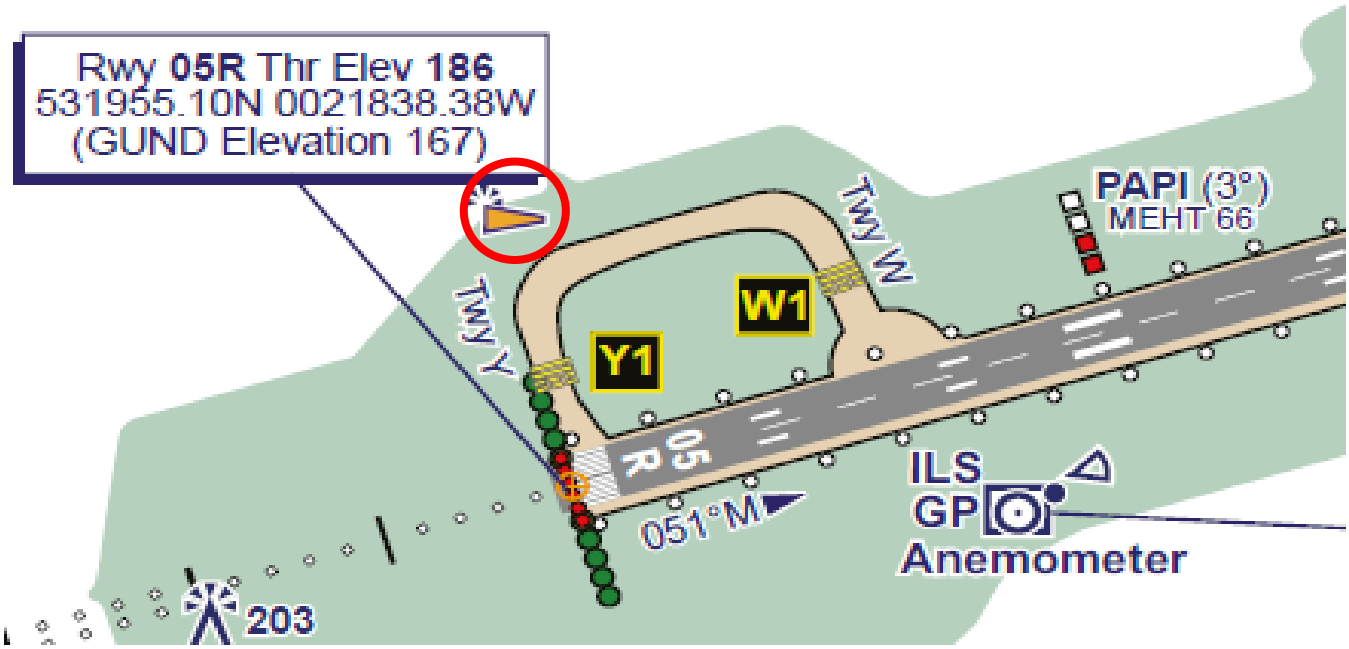
4.2.1 Aerodrome Reference Point



4.2.2 Wind direction indicators (05L/23R & 23L)

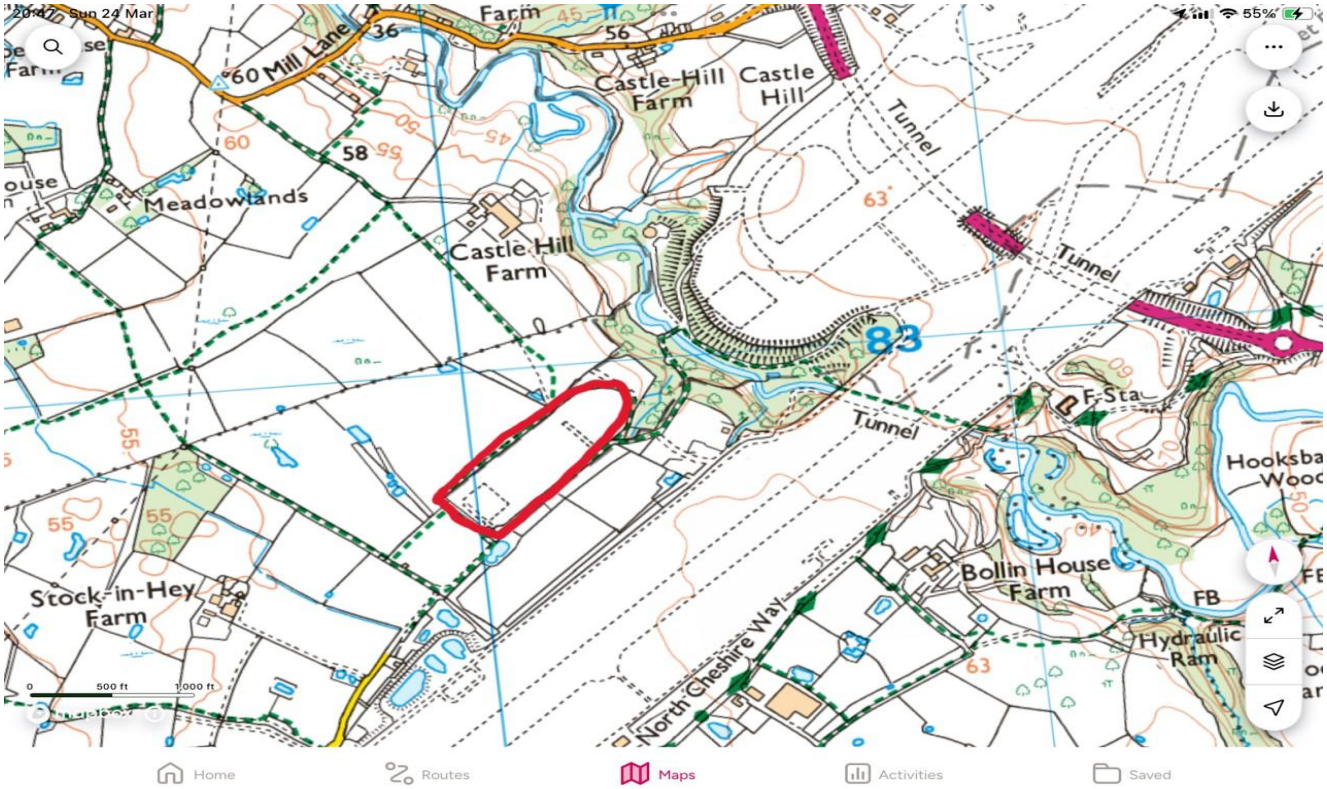


4.2.3 Wind direction indicators (05R)



4.3 Location of any aerodrome facilities and equipment outside the boundaries of the aerodrome.

4.3.1 Runway 23R Localizer



4.4 Aerodrome Physical Characteristics

4.4.1 Location and Elevation

Aerodrome Reference Point (Mid-point Runway 05L/23R)	Lat. 532113.48N Long. 0021629.82W
Aerodrome Elevation	257ft
Apron Elevation	238ft

4.4.2 INS Checkpoints

All INS checkpoints have been surveyed in compliance with the WGS84 specification. Comprehensive details are to be found in the UK AIP.

4.4.3 Obstacles Infringing Standard Protected Surfaces

Obstacle	**Location**	**Co-ordinates & height**	**Surface penetrated & amount**	**Where promulgated**
Air Traffic Control Tower	Next to North side fire station	53.21.27.89N 002.16.46.33W Height 434 Feet AMSL	Inner Horizontal Surface	To be included in UKAIP/NOTAM
Chimney	On 'Airport Hotel' public house abeam link Juliet	53.21.50.28N 002.15.28.83W 285 feet	23R Approach 24 feet	UK AIP Aerodrome Chart
Chimney	On terraced house Ringway Road	53.21.52.94N 002.15.02.63W 281 feet	05L Take-Off Climb 13 feet	Type A chart
SMR Antenna	On roof of ATC tower	53.20.27.30N 002.16.59.53W 316 feet	Transitional 4 feet	UK AIP Aerodrome Chart
Tree (3553)	South of airfield	53.20.56.86N, 002.16.21.94W 255.35 feet	23L Approach 13 feet	UK AIP AD 2.10
Tree (3203)	South of airfield	53.21.05.47N, 002.13.54.38W 344.85 feet	Inner Horizontal 11 feet	UK AIP AD 2.10
National Grid Pylon	South of airfield	531905.19N 0021705.85W 397 feet	Inner Horizontal	UK AIP AD 2.10

4.4.4 Aeronautical Ground Lighting (AGL)

4.4.4: a) General

Aeronautical Ground Lighting (AGL) is a vital part of the airport's operational infrastructure, enabling the continued safe operation of public transport flights at night and during adverse weather conditions.

Manchester Airport is certificated to operate in Category IIIB weather conditions on Runway 23R/05L.

4.4.4: b) Provision of Lighting – Runways

Runway	05L	23R	05R	23L
H I App.	Coded centreline 908m Five cross bars	Coded centreline 914m Five cross bars	Coded centreline 900m Five cross bars	Coded centreline 900m Five cross bars
Supplementary App.	Inner 300m	Inner 300m	None	None
Touchdown Zone	900m LED	900m LED	None	None
PAPIs	RHS 3º 325m from displaced threshold	LHS 3º 357m from displaced threshold	LHS 3º 437m from threshold	LHS 3º 561m from displaced threshold
Threshold	HI **green** with wing bars	HI **green** with wing bars	HI **green** with wing bars	HI **green** with wing bars
Runway Edge	Bi-directional flush fitted 60m spacing LED	Bi-directional flush fitted 60m spacing LED	Bi-directional flush fitted 61m spacing	Bi-directional flush fitted 61m spacing
Runway Centreline	Coded 15m spacing LED	Coded 15m spacing LED	Coded 30m spacing	Coded 30m spacing
End Lights	HI **red**	HI **red**	HI **red** wing bars	HI **red**

4.4.4: c) Provision of Lighting – Taxiways and Aprons

Taxiway Lighting conforms to the requirements of UK REG (EU) 139/2014 CS ADR-DSN.M.710.

4.4.4: d) Provision of Lighting – Obstructions

Asset Management maintains a comprehensive record of obstacle lighting location.

Obstacles off the Airfield that require red obstacle lighting are the responsibility of the owner of the obstacle.

Airfield Systems are responsible for the provision of Obstacle lighting on the airfield, including temporary portable lights.

4.4.4: e) AGL Serviceability

Survey results to be analysed, any lamps which have fallen below 50% intensity or any adjacent lamp failures should be replaced/repaired. If this cannot be actioned, then all relevant stakeholders should be informed (Airfield Operations/Engineering Operations Management Team).

4.4.5 Manoeuvring Area Surfaces

4.4.5: a) Runways

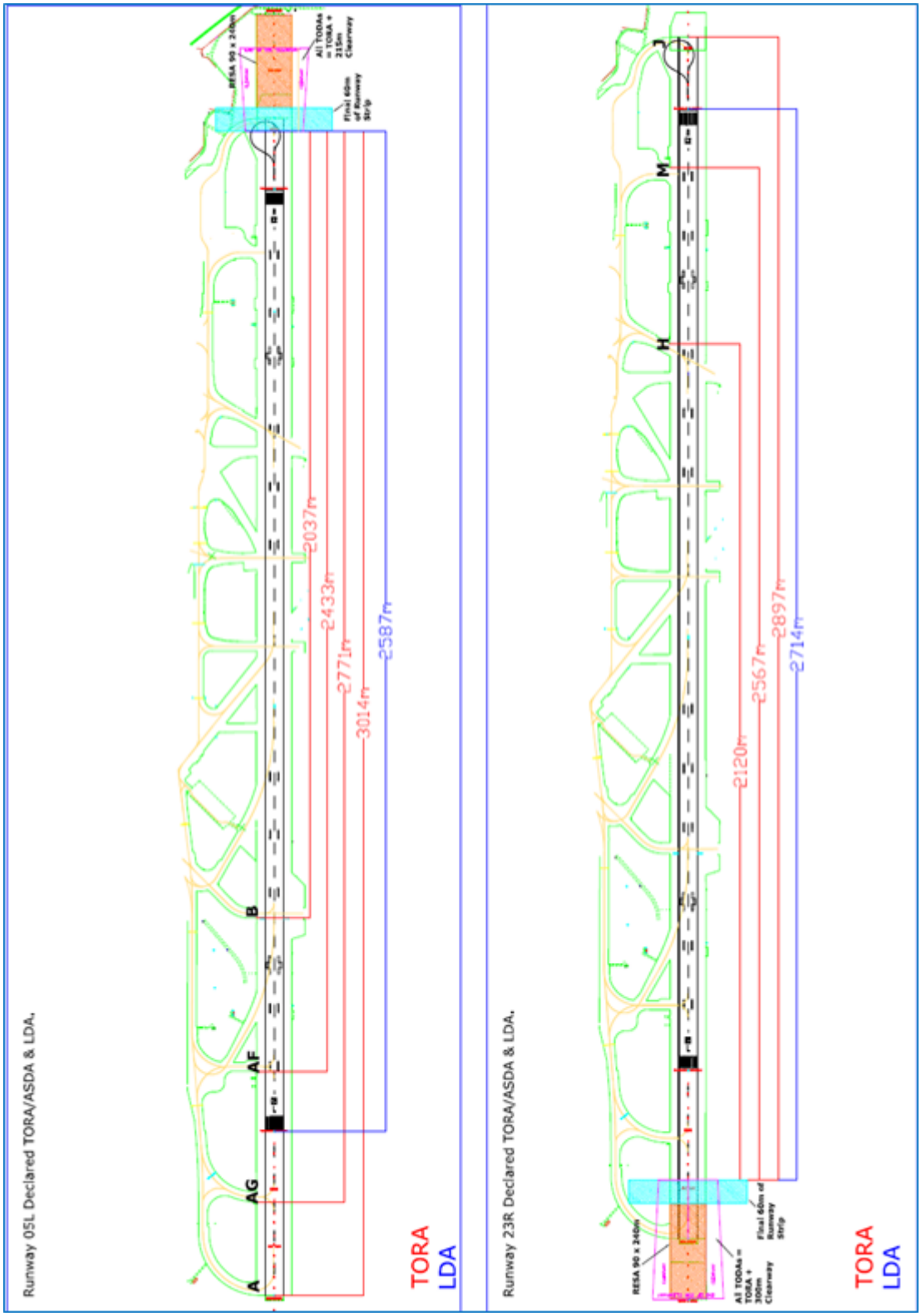
Runway	05L	23R	05R	23L
Hdg ° (true)	051°	231°	051°	231°
Length (m)	3048	3048	3047	3200
Width (m)	46	46	45	45

Starter Extension	None	None	None	150m x 30m
Surface	Concrete/ Asphalt		Concrete/Grooved Asphalt	
Slope overall	0.49% up	0.49% down	0.46% up	0.48% down
Longitudinal Slopes	Locally less than 0.25% Change between consecutive slopes less than 1.5% Maximum rate of change of gradient over 30m is 0.41%.		Local slopes less than 1.25%. Change between consecutive slopes less than 1.5%. Maximum rate of change of gradient over 30m is 0.1%.	
Sightlines	Owing to the humpbacked profile the full length of the runway may not be visible from the flight deck of an aircraft lined up at the end of the runway. The high point of the runway is abeam link golf.		Full length of the runway is visible from any point.	
Runway PCN	94/F/C/W/T	94/F/C/W/T	79/F/C/W/T	79/F/C/W/T
Shoulders	23m each side		7.5m inner each side (paved), plus 7.5 outer each side (stabilised grass)	
Shoulder PCN	25% of runway strength		42/R/C/W/T	
Stop-way	None declared		None declared	
Threshold Elevation	212 feet	249 feet	186 feet	227 feet
TORA	3014m	2897m	3047m	3200m
TODA	3229m	3197m	3347m	3500m
ASDA	3014m	2897m	3047m	3200m
LDA	2587m	2714m	2864m	2864m

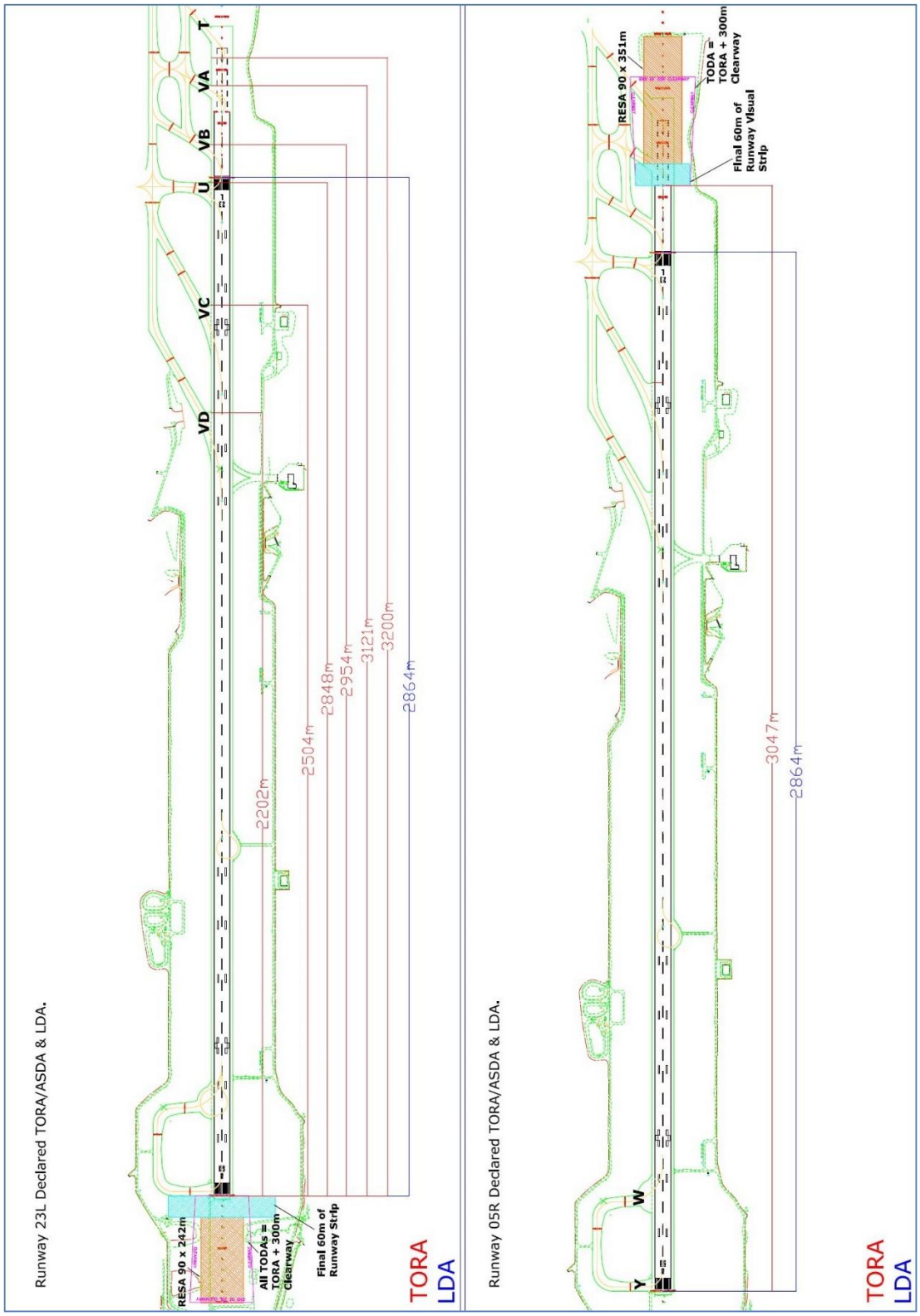
4.4.5: b) Runway End Safety Areas (RESA)

RUNWAY END SAFETY AREAS (RESA)				
Runway	**05L**	**23R**	**05R**	**23L**
Undershoot RESA distance (ref Ch3 Para 5.2, 5.3)	517m	390m	242m	534m
Overrun RESA distance (ref Ch3 Para 5.2, 5.3)	240m	240m	351m	242m
Runway Slope - first quarter (ref Ch3 Para 3.3.3)	Less than 0.8%	0.88%	Less than 0.8%	Less than 0.8%
RESA Slopes (ref Ch3 Para 5.6 5.7 and 5.8)	Less than 5%	Less than 5%	Less than 5%	Less than 5%
Navaids in RESA (ref Ch3, 5.9 & 6)	No	Small frangible monitor aerial.	Small frangible monitor aerial.	No
De-lethalisation in Graded Area (ref Ch3 Para 4.1.3)	Yes	Yes	Yes	Yes
De-lethalisation of full RESA (ref Ch3 Para 5.4 implied)	Yes	Yes	Yes	Yes
Notes	Frangible ILS monitor aerial and plinth within declared RESA.			
Clearway	215m	300m	300m	300m
Strip Dimensions	280m wide 60m beyond pavement ends.		280m wide 60m beyond pavement ends **Note** - Strip narrows to 56m on south Side of starter extension.	

4.4.6 Declared distances and Runway End Safety Areas (Runway 05L-23R)



4.4.7 Declared distances and Runway End Safety Areas (Runway 05R-23L)



4.4.8 Northern Taxiway System

Designator	ICAO Code	TWY or ASTL	Width	PCN	Centreline to object clearance*	Amplifying Comments
Alpha	E	TWY	23m	52/R/C/W/T (A1-A2) 46/F/C/W/T (A2-B) 34/R/C/W/T(B-A4) 132/F/C/W/U (A4-D2)	49m	
Bravo	E	TWY	23m	52/R/C/W/T (B2-B3) 52/R/C/W/T(B4-B5)	49m 47.5m	
Charlie	E	TWY	23m	95/R/C/W/T	47.5m	
November-Delta (abeam STD 309-237)	E	ASTL	23m	99/R/C/W/T	46.5m	Strip incorporates Apron Road
November-Delta (abeam STD 303-3 08)	E	ASTL	23m	99/R/C/W/T	50.5m	Strip incorporates Apron Road
November-Delta (R – N D1)	E	ASTL	23m	99/ R/C/W/T	42.5m	Strip incorporates Apron Road System
November-Charlie (NC1 – D3)	E	ASTL	23m	91/ R/C/W/T	42.5m	Strip incorporates Apron Road System
Papa (P4 – P1)	F	TWY/ASTL	25m	91/ R/C/W/T	55m/50.5m	
Foxtrot	E	TWY	25m	26/R/C/W/T	49m	
Juliet	E	TWY	23m	64/R/C/W/T (J1-J2) 79/F/C/W/T(J2-J4) 127/R/C/W/T (J4-K1)	49m	
Juliet Echo	C	ASTL	23m	89/R/C/W/T (STD 1-7) 67/R/C/W/T (STD9-TWYB)	32m	Strip incorporates Apron Road. Available for aircraft up to and including B757. Strip meets Code C Taxiway Requirements, but not Code D Apron Stand Taxi lane requirements.
Juliet Foxtrot	D	ASTL	23m	98/R/C/W/U (STD 42-44) 76/R/C/W/T (STD44-TWYB)	38m	Strip incorporates Apron Road System
Golf G1-STD 51 STD52-G3	D	ASTL	23m	95/R/C/W/T 85/R/C/W/T	36m	Will accept Code E aircraft with a max wingspan of 60m (A330/B787).
Golf G3– abeam STD 58)	C	ASTL	18m	127/R/C/W/T	26.5m	
Hotel	E	TWY	23m	105/R/C/W/T	47.5m	
Kilo	F	TWY	25m	76/R/C/W/T	55m	

Lima	E	ASTL	23m	74/R/C/W/T TWY P-STD4 68/R/C/W/T STD4-TWY D	42.5m	Strip incorporates Apron Road System.
Romeo	E	ASTL	23m	76/R/C/W/T	42.5m or more	Strip incorporates Apron Road System.
Echo (between NC and Stand 82)	E	ASTL	23m	43/R/C/W/T	45m narrowing to 43.1m abeam Stand 69	
November Alpha	E	ASTL	23m	85/R/C/W/T STD110-116 59S/F/C/W/T STD110-104	42.5m	
November Alpha Blue	E	ASTL	23m	85/R/C/W/T STD 110-116 59S/F/C/W/T STD110-104		
November Alpha Orange	E	ASTL	23m	85/R/C/W/T STD 110-116 59S/F/C/W/T STD110-104		
November–Bravo	E	ASTL	23m	87/R/D/W/T	42.5m	
November Bravo Blue	E	ASTL	23m	87/R/D/W/T		
November Bravo Orange	E	ASTL	23m	87/R/D/W/T		
Quebec	E	TWY	23m	97/R/B/W/T	42.5m	By-pass route across stands 61 to 64R
Zulu	C	ASTL	23m	128/R/D/W/T	26	
Zulu Blue	C	ASTL	23m	128/R/D/W/T	22.5	
Zulu Orange	C	ASTL	23m	128/R/D/W/T	22.5	
Signature Taxiway	B	TWY	10.5m	TBC	19.5m	
*Taxiway to object clearance is based upon the nearest non-mobile object including parked aircraft. Airside roadways and vehicles driving on these may exist within this clearance.						

4.4.9 Southside Taxiway System

Designator	Code	TWY or ASTL	Pavement Width	PCN	Centreline to object clearance	Amplifying Comments
Bravo Zulu	E	TWY	23m	86/F/C/W/T	47.5m	
Delta Zulu	E	TWY	23m	59/F/C/W/T	47.5m	
Foxtrot Zulu	E	TWY	23m	91/F/C/W/T	47.5m	
Hotel Zulu	E	TWY	23m	49/F/C/W/T	47.5m	
Victor	E	TWY	23m	109/R/C/W/T HZ-V142/R/D/W/T	49m	A380 capable (V1-V5)
Victor Alpha	E	TWY	23m	33/R/C/W/T	49m	A380 capable
Victor Bravo	E	TWY	23m	127/R/C/W/T	47.5m	
Victor Charlie	E	TWY	23m	128/R/C/W/T	47.5m	
Victor Delta	E	TWY	23m	129/F/C/W/T	47.5m	
Uniform	E	TWY	23m	123/R/C/W/T	47.5m	
Whisky	E	TWY	23m	125/R/C/W/T	47.5m	
Yankee	E	TWY	23m	125/R/C/W/T	47.5m	
Tango	E	TWY	23m	28/R/C/W/T	49m	A380 capable

Sierra	D	TWY	23m	128/R/C/W/T	47.5m	Code D due Runway/Taxiway Centreline Separation.

4.4.10 Runway 05L/23R Links, Exits & Rapid Exit Taxiways

Designator	Code	TWY or ASTL	Pavement Width	PCN	Strip Width	Amplifying Comments
Juliet	E	TWY	23m	136/F/C/W/T	47.5m	
Mike	F	TWY	25m	135/F/B/W/T	55m	
Hotel	E	TWY	23m	54/F/C/W/T	47.5m	
Foxtrot	E	TWY	23m	93/F/C/W/T	47.5m	Longitudinal slope is 1.7%
Papa	F	TWY	23m	124/R/C/W/T	51m	Longitudinal slope is 2.2%
Bravo Delta	E	TWY	23m	85/R/C/W/T	47.5m	
Bravo	E	TWY	23m	56/F/C/W/T	49m	
Alpha Echo	F	TWY	23m	48/R/B/W/T	51m	
Alpha Foxtrot	E	TWY	23m	79/F/C/W/T	47.5m	
Alpha Golf	F	TWY	25m	43/F/C/W/T	55m	
Alpha	E	TWY	23m	52/R/C/W/T	47.5m	

4.4.11 Runway and Taxiway Access Points

Vehicle holding points have been established on roadways leading directly onto runways and taxiways from points on the perimeter of the airfield. There are two types of holding position.

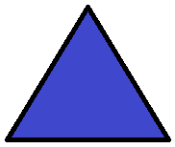
4.4.12 Vehicle Runway Access Point (VRAP)

There are five of these, each with a unique designator relating to a nearby Landmark such as a crash gate. They are shown as a

Symbol on the Manoeuvring Area Drivers Map. Signage at each of these points will show the unique designator in every case. The ground marking is a 'Pattern A' runway holding point marking, suitably reduced in scale for road use. There are road guard lights ('wig-wags') adjacent to the ground marking.

4.4.13 Vehicle Taxiway Access Point (VTAP)

There are seven of these, each with a unique designator relating to a nearby landmark such as a crash gate. They are shown as a



Symbol on the Manoeuvring Area Drivers Map. Signage at each of these points will show the unique designator in every case. The ground marking is a double white line. Vehicles holding at the ground marking will be clear of the taxiway strip.

4.4.14 Visual Aids

- All visual aids will comply with the requirements of ICAO Annex 14, CAP637.
- Lighting will be operated in accordance with the requirements of using control systems that comply with CAP670.
- All visual aids are subject to inspection for damage, deterioration and serviceability requirements as described in this Manual.
- All visual aids are maintained, repaired, and replaced in accordance with the requirements of UK Reg (EU) 139/2014.
- The failure of any visual aid will be promulgated by NOTAM, ATIS, RTF as appropriate. CAA approved temporary visual aids may be used if required.
- Comments made by operators and operational staff concerning the location, operation and effectiveness of visual aids will be considered.
- The implication for visual aids will be considered whenever there are new airfield developments.

4.4.15 Signals

- There are no signals area.
- There are 3 illuminated wind sleeves, visible from all runway thresholds.
- Marshalling signals provided will comply with Rule 62 of the Rules of the Air Regulations with the following exception: the signal given to a pilot of a taxiing aircraft by a marshaller, indicating that there is sufficient wing tip clearance will be 'both arms outstretched horizontally'.

4.4.16 Signs

- Illuminated Runway Mandatory Holding Position signs are located at each runway link.
- Illuminated Taxiway information and Mandatory signs are provided at taxiway intersections and holding positions along taxiways.
- Illuminated stand identification signs are provided for most aircraft stands whether pier-served or remote, apart from Stands 61 - 64, 80, 231

4.4.17 Stand Design & Layout

4.4.17: a) Stand Allocation

Stand Allocation is undertaken by MA Airfield Control using a software application called CHROMA ASSIGN. The CHROMA ASSIGN database contains information about the capacity and interdependencies of the stand. The schedule of flights is then applied, and CHROMA ASSIGN allocates stands according to two sets of parameters:

The principal parameters are:

- The availability of a stand at the expected arrival and /or departure time of a flight.
- The capacity of the stand to accommodate the aircraft type.

The secondary parameters are:

- The terminal allocated to the airline operator.
- Any special border control and security considerations.

- Agreed policy on remote vs. contact stands.
- Any other parameters included in the Stand Allocation Policy, which is a service–driven agreement between MA and its airline customers.

The allocation may be manually overridden by Airfield Controllers to tactically manage capacity. The application will however warn the user of a potential safety conflict between aircraft on adjacent stands with overlapping occupancy times.

To minimise the hazards associated with hot brakes and other technical faults, aircraft subject to an emergency response involving the Airport Fire Service will be allocated a remote stand by Airfield Control. The Airport Fire Service will instruct pilots to keep anti-collision lights illuminated until such time they are satisfied the aircraft is safe to be approached by ground personnel. This policy does not apply to aircraft reporting a Medical Emergency.

4.4.17: b) Aircraft Parking & Docking

Docking guidance of aircraft by Marshalling signals is the sole responsibility of MA Airfield Operations.

Docking guidance of aircraft by SAFEDOCK is the responsibility of Handling Agents.

Docking of an aircraft under tow is the responsibility of the aircraft operator or the party contracted to tow the aircraft.

4.4.17: c) Advanced Visual Docking Guidance Systems (A-VDGS)

SAFEDOCK A-VDGS is currently employed to guide aircraft to the correct parking position on most contact stands and some remote stands. This is a fully automated system which recognises the aircraft type and provides precision docking guidance once activated by ground handling agent staff.

4.4.17: d) Safety Instructions for Pilots

"PILOTS MUST NOT ENTER ANY PART OF A STAND UNLESS THE A-VDGS HAS BEEN ILLUMINATED OR A MARSHALLER IS PRESENT AT THE HEAD OF THE STAND."

4.4.17: e) Isolated Aircraft Parking Position

The decision-making process to determine the isolated aircraft parking position (in certain circumstances) is undertaken between ATC, Airfield Ops and Greater Manchester Police.

4.4.18 Table of Facilities

Stand No	Manufacturer	Installation	Rated Power Output	Single/ Dual	28vdc Convertor available?	Can be used on L & R?
1	AXA	Pantograph	90kva	Single	Yes	
2	AXA	Pantograph	90kva	Single	Yes	
4	AXA	Pantograph	90kva	Single	Yes	
5	AXA	Pantograph	90kva	Single	Yes	
6	AXA	Pantograph	2 x 90kva	Dual	No	
7	AXA	Pantograph	90kva	Single	Yes	
8	AXA	Pantograph	2 x 90kva	Dual	No	
9	AXA	Pantograph	90kva	Single	Yes	
10	AXA	Pantograph	2 x 90kva	Dual	Yes	
11	AXA	Pantograph	90kva	Single	Yes	
12	AXA	Pantograph	4 x 90kva	Quad	No	
12L	AXA	Pop-up	90 Kva	Single	No	
12R	AXA	Pop-up	90 Kva	Single	No	
15	AXA	Pantograph	90kva	Single	No	
16	AXA	Pantograph	90kva	Single	Yes	
17	AXA	Pantograph	90kva	Single	Yes	
18	AXA	Pantograph	90kva	Single	No	
22	AXA	Pantograph	2 x 90kva	Dual	No	
23	AXA	Pantograph	2 x 90kva	Dual	No	
24	AXA	Pantograph	90kva	Single	No	
25	AXA	Pantograph	90kva	Single	No	
26	AXA	Pantograph	2 x 90kva	Dual	No	
27	AXA	Pantograph	2 x 90kva	Dual	No	
28	AXA	Pantograph	90kva	Single	No	
29	AXA	Pantograph	2 x 90kva	Dual	No	
31	AXA	Pantograph	2 x 90kva	Dual	No	
32	AXA	Pantograph	2 x 90kva	Dual	No	
41	AXA	Pantograph	90kva	Single	No	
42	AXA	Pantograph	2 x 90kva	Dual	No	
43	AXA	Pantograph	2 x 90kva	Dual	Yes	
44	AXA	Airbridge	2 x 90kva	Dual	No	Not 44L and 44R
47	AXA	Pantograph	90kva	Single	No	
48	POWERVAMP	Pantograph	90kva	Single	No	
49	AXA	Airbridge	2 x 90kva	Dual	No	
50	AXA	Pantograph	90kva	Single	No	
51	AXA	Pantograph	90kva	Single	Yes	
52	POWERVAMP	Pantograph	90kva	Single	Yes	
53	POWERVAMP	Pantograph	90kva	Single	Yes	
54	AXA	Airbridge	90kva	Single	No	
55	AXA	Airbridge	2 x 90kva	Dual	No	
55L	AXA	Airbridge	2 x 90kva	Dual	No	
55R	None					
57	None					
58	None					
61	None					
62	None					
63	None					
64	None					
65	None					

66	AXA	Pantograph	90kva	Single	No	Centre only
67	AXA	Pantograph	90kva	Single	No	Centre only
68	AXA	Pantograph	90kva	Single	No	Centre only
69	AXA	Pantograph	90kva	Single	No	
70						
71	None					
72	None					
73	None					
74	None					
80	None					
81	AXA	Pantograph	2 x 90kva	Dual	No	Centre only
101	POWERVAMP	Pantograph	90kva	Single	No	
103	POWERVAMP	Pantograph	90kva	Single	No	
104	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
105	POWERVAMP	Pantograph	90kva	Single	No	
106	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
106R	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
107	POWERVAMP	Pantograph	90kva	Single	No	
108	POWERVAMP	Pantograph	90kva	Single	No	
109	POWERVAMP	Pantograph	90kva	Single	No	
110L	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
110	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
111	POWERVAMP	Pantograph	90kva	Single	No	
112R	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
112	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
113L	POWERVAMP	Pantograph	90kva	Single	No	
113	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
113R	POWERVAMP	Pantograph	90kva	Single	No	
114	POWERVAMP	Pantograph	90kva	Single	No	
116	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
116L	POWERVAMP	Pantograph	2 x 90kva	Dual	No	
301	AXA	Pantograph	90kva	Single	No	
302	AXA	Pantograph	2 x 90kva	Dual	No	
303	Jetway	Airbridge	90kva	Single	No	
304	AXA	Pantograph	2 x 90kva	Dual	No	
306	AXA	Pantograph	2 x 90kva	Dual	No	
307	AXA	Pantograph	90kva	Single	No	
308	AXA	Pantograph	2 x 90kva	Dual	No	
309	AXA	Pantograph	90kva	Single	No	
231	None					
233	AXA	Pantograph	90kva	Single	No	
901	POWERVAMP	Pantograph	90kva	Single	No	
903	POWERVAMP	Pantograph	90kva	Single	No	
905	POWERVAMP	Pantograph	90kva	Single	No	
907	POWERVAMP	Pantograph	90kva	Single	No	
909	POWERVAMP	Pantograph	90kva	Single	No	
911	POWERVAMP	Pantograph	90kva	Single	No	
913	POWERVAMP	Pantograph	90kva	Single	No	
915	POWERVAMP	Pantograph	90kva	Single	No	
917	POWERVAMP	Pantograph	90kva	Single	No	
919	POWERVAMP	Pantograph	90kva	Single	No	
925	POWERVAMP	Pantograph	90kva	Single	No	
927	POWERVAMP	Pantograph	90kva	Single	No	
929	POWERVAMP	Pantograph	90kva	Single	No	
203L	POWERVAMP	Pantograph	90kva	Single	No	
203	POWERVAMP	Pantograph	108kva	Dual	No	
204	POWERVAMP	Pantograph	360kva	Quad	No	

205	POWERVAMP	Pantograph	90kva	Single	No	
206L	POWERVAMP	Pantograph	90kva	Single	No	
206	POWERVAMP	Pantograph	360kva	Quad	No	
207	POWERVAMP	Pantograph	180kva	Dual	No	
207R	POWERVAMP	Pantograph	180kva	Dual	No	
208	POWERVAMP	Pantograph	360kva	Quad	No	
209L	POWERVAMP	Pantograph	90kva	Single	No	
209	POWERVAMP	Pantograph	180kva	Dual	No	
210	POWERVAMP	Pantograph	360kva	Quad	No	
210L	POWERVAMP	Pantograph	90kva	Single	No	
211	POWERVAMP	Pantograph	90kva	Single	No	
212	POWERVAMP	Pantograph	360kva	Quad	No	
213	POWERVAMP	Pantograph	180kva	Dual	No	
213R	POWERVAMP	Pantograph	180kva	Dual	No	
214	POWERVAMP	Pantograph	360kva	Quad	No	
214L	POWERVAMP	Pantograph	90kva	Single	No	
215	POWERVAMP	Pantograph	90kva	Single	No	

4.4.19 Surface Markings

- Painted surface markings are provided on the runway and taxiways in accordance with UK REG (EU) 139/2014 CS-ADR-DSN.
- "Runway Designation" markings at runway crossings Bravo, Bravo Zulu, Papa, Delta Zulu, Foxtrot, Foxtrot Zulu, Hotel, Hotel Zulu and Tango.
- Surface markings for stand entry guidance markings include a yellow painted stand number with arrow indicating the extended stand centreline. The stand centreline itself is painted yellow and runs only within the stand area and not the taxiway strip.
- Temporary marking of closed aircraft movement areas is achieved using 5m long mobile barriers painted white with red panels which are lit with red obstacle portable lights at night and in LVP conditions.

4.4.20 Marking of Airfield Work in Progress

- Inside the Localiser Sensitive Areas WIP is marked using non-metallic and frangible fencing.
- All other WIP utilises 2 metre fencing of a more substantial construction, with high visibility base and obstruction lighting.

4.4.21 Taxiway manoeuvring restrictions.

Table as published NATS MATS Pt2.

Taxiway	Point	Restriction	Notes
A	AF	Max Code E (except AN124 & B748 for **entrance** only)	
	AG	Aircraft cannot pass behind another holding at AG1.	
	A3 - B1	Route not available	
	A3 - A4	Route not available to Code F	
	A4 - A3	Route not available to Code F	
	A4 - D1	Max GLEX, GLF5, FK70	Blue edge lights only. Route not available in LVP VIS
B	BD	Max Code E (except AN124 & B748 as **exit** only)	
	B1 - A3	Route not available	
	B2 - B3	Code F not separated when aircraft is between K4 and B2	There is no size restriction between aircraft holding at C2 and B3 at the same time.
	B3 – B2	Code F not separated when aircraft is between K4 and B2	There is no size restriction between aircraft holding at C2 and B3 at the same time.
	B3 - D1	Route not available	
	B3 - K5	Route not available	
	B4 - B5	Max Code E	
	B5 - B4	Max Code E	

C	C2 - P3 (right turn)	Max A330	Blue edge lights only. Route not available in LVP VIS
D	Fairey's Apron	Aircraft under tow only	Visual confirmation from the VCR that inbound aircraft tail is clear of TWY D is required. If unable to obtain visual confirmation an OPS vehicle will be required to confirm
	D1 - A4	Max GLEX, GLF5, FK70	Blue edge lights only. Route not available in LVP VIS
	D1 - B3	Route not available	
	D2 - P4	Max B752	
G	Between Stands 48-55	Max Code D	.
	Between G3-Stand 58	Max Code C	
		Code E for Stand 55 must enter and exit via G4. Code E must perform standard published pushback.	
		G not separated from Code F between J2 - J4	
J		Code F between J2 - J4 not separated from G	
JE		Max B757	GMC is to consider that wingtip clearance is minimal between aircraft on JE and JF
		Max B737 (when B767 on JF)	GMC is to consider that wingtip clearance is minimal between aircraft on JE and JF
JF		Max B737 (when any aircraft holding B6)	No taxiing in front of pushback GMC is to take into account that wingtip clearance is minimal between aircraft on JE and JF
K	K2 - K3	Code F separated from Code E between B4-B5	
	K3 - K2	Code F separated from Code E between B4-B5	
	K4 - B2	Code F not separated when aircraft is between B2 and B3.	There is no size restriction between aircraft holding

			at C2 and B3 at the same time.
	K5 - B3	Route not available	
L		Max Code E **except** A346 & B777	
NB		Max Code E	Unlit
NC	North of NC1	Max Code E	
P	P3 - C2 (left turn)	Max B753	Blue edge lights only. Route not available in LVP VIS
	P4 - D2	Max B752	
Q		Max Code E	Unlit

4.5 Non-Compliances with Certification Specifications

4.5.1 Items recorded as Special Conditions on the Aerodrome Certificate

Date	Relevant Certification Specification (CS)	Description of SC	Reference to supporting documentation
25/02/2015	A.005	Aerodrome Reference Code number (code element one) is determined by the greater value of TODA or ASDA not Aeroplane reference field length.	This is standard practice in the UK, allowed by UK CAA
25/02/2015	CS ADR-DSN.B.060 (c) (2)	B.060 Longitudinal slope slightly out of tolerance at SW end of 05L-23R.	Risk Assessment SC-02
25/02/2015	CS ADR-DSN.B.065 (c) (1)	B.065 Radius of slope transition slightly out of tolerance is places on 05L-23R.	Risk Assessment SC-02
25/02/2015	CS ADR-DSN.B.070 (b) (1)	Sight distance slightly out of tolerance.	Risk Assessment SC-02
25/02/2015	CS ADR-DSN.B.075 (a) (1)	Distance between slope changes slightly out of tolerance on 05L-23R.	Risk Assessment SC-02
25/02/2015	CS ADR-DSN.D.260	The separation distance between the centreline of Runway 05L-23R and the centreline of Taxiway Juliet	Risk Assessment SC-03

		reduces to 171.5m between J3 and J4.	
25/02/2015	CS ADR-DSN D.265 (b) (1)	The longitudinal slopes on Taxiways P & F exceed 1.5% where they intersect with Runway 05L-23R. This is due to local topography.	Risk Assessment RO-04
25/02/2015	CS ADR-DSN.L.600	Road-holding position marking is Pattern A	Risk Assessment RO-05
25/02/2015	CS ADR-DSN.M.770	EGCC uses amber lamps for consistency with RHPs.	Risk Assessment RO-05
25/02/2015	CS ADR-DSN.B.095 (f) & CS ADR-DSN.L.565(5) (b)	Nose wheel steering angle will exceed 45 degrees when used by certain larger aircraft types	The manoeuvre is well within the capabilities of most aircraft types, which have a maximum steering angle of 70 degrees. Pilot opinions have been canvassed on the usability of the turning pads installed at Manchester. These all say that the pads are perfectly usable without stress to aircraft or difficulty in manoeuvring.

4.5.1: a) The request for Special Conditions In Progress

Date	Relevant Certification Specification (CS)	Description of SC	Reference to supporting documentation
25/02/2015	CS ADR-DSN.D.250	In certain locations along the taxiways the main wheel to pavement clearance may be less than that specified at CS ADRDSN.D.240 (a)	AW-02 – Works in Progress (WIP) SC-14 Reduction in wingtip obstacle clearance. Reviewed 10/06/25
25/02/15	CS ADR-DSN.D.320	Taxiway centerline to object clearances: Airside roadways are located entirely or partially within the strips of certain Apron Stand Taxi Lanes A380 Uses some taxiways with slightly reduced centreline to object clearances.	SC-14 Reduction in wingtip obstacle clearance. Reviewed 10/06/25 AW-02 – Works in Progress (WIP) Minor non-compliance (-2m against revised standard)

4.5.2 Aircraft Stand Provision

Manchester Airport has a complex aircraft parking stand arrangement spread across 2 terminals, with contact and remote stands.

There are 130 numbered parking stands at Manchester Airport. There are a mixture of Multi-Choice Apron (MCA) and Multi Aircraft Ramp System (MARS) stands that can be found across the airfield.

There are a variety of stand dimensions and configurations, with complex interdependencies between adjacent stands according to the size of aircraft parked. The stands can accommodate a total of 105 narrow bodied aircraft, reducing to a lower figure, when wide-bodied aircraft are parked. The airport has a total of 24 wide bodied aircraft stands.

Stands 5 and 21 do *not* have the capability to park a full size Code C aircraft.

Terminal 1
Terminal 2
Terminal 3
Remote

Stand Number	Terminal Contact or Remote	Stand Entry Guidance Provided	Notes
1	R	SAFEDOCK	
2	R	SAFEDOCK	
4	R	SAFEDOCK	
5	R	SAFEDOCK	
6	R	SAFEDOCK	
7	R	SAFEDOCK	
8	R	SAFEDOCK	
9	R	SAFEDOCK	
10	R	SAFEDOCK	
11	R	SAFEDOCK	
12	R	SAFEDOCK	
12L	R	M	
12R	R	SAFEDOCK	
15	R	SAFEDOCK	
22	R	SAFEDOCK	
23	R	SAFEDOCK	
24	R	SAFEDOCK	
25	R	SAFEDOCK	
26	R	SAFEDOCK	
27	R	SAFEDOCK	
28	R	SAFEDOCK	
29	R	SAFEDOCK	
31	R	SAFEDOCK	
32	R	SAFEDOCK	
61L	R	M	
61	R	M	Situated on Taxiway Quebec

61R	R	M	Situated on Taxiway Quebec
62	R	M	Situated on Taxiway Quebec
70	R	M	
71	R	M	
72	R	M	
73	R	M	
73L	R	M	
74	R	M	
74R	R	M	
80L	R	M	Situated on Taxiway November-Bravo
80R	R	M	Situated on Taxiway November-Bravo
80	R	M	
Stand Number	Terminal Contact or Remote	Stand Entry Guidance Provided	Notes
81	R	M	
231L	R	M	Situated on Taxiway November-Bravo
231R	R	M	
231	R	M	
233	R	M	
901	R	SAFEDOCK	
903	R	SAFEDOCK	
905	R	SAFEDOCK	
907	R	SAFEDOCK	
909	R	SAFEDOCK	
911	R	SAFEDOCK	
913	R	SAFEDOCK	
915	R	SAFEDOCK	
917	R	SAFEDOCK	
919	R	SAFEDOCK	
925	R	SAFEDOCK	
927	R	SAFEDOCK	
929	R	SAFEDOCK	
113L	R	SAFEDOCK	
113	R	SAFEDOCK	
113R	R	SAFEDOCK	
114	R	SAFEDOCK	
116	R	SAFEDOCK	
116L	R	SAFEDOCK	
16	3	SAFEDOCK	
17	3	SAFEDOCK	
41	3	SAFEDOCK	
42	3	SAFEDOCK	
43	3	SAFEDOCK	
44	3	M	
44L	3	SAFEDOCK	
44R	3	M	
47	3	SAFEDOCK	
49	3	SAFEDOCK	
50	3	SAFEDOCK	

51	3	SAFEDOCK	
52	3	SAFEDOCK	
53	3	SAFEDOCK	
54	3	SAFEDOCK	
55	3	SAFEDOCK	
55L	3	SAFEDOCK	
55R	3	SAFEDOCK	
57	R	M	
58	R	M	
101	2	SAFEDOCK	
103	2	SAFEDOCK	
104	2	SAFEDOCK	
Stand Number	Terminal Contact or Remote	Stand Entry Guidance Provided	Notes
105	2	SAFEDOCK	
106	2	SAFEDOCK	
106R	2	SAFEDOCK	
107	2	SAFEDOCK	
108	2	SAFEDOCK	
109	2	SAFEDOCK	
110	2	SAFEDOCK	
110L	2	SAFEDOCK	
111	2	SAFEDOCK	
112	2	SAFEDOCK	
112R	2	SAFEDOCK	
203L	2	SAFEDOCK	
203	2	SAFEDOCK	
205	2	SAFEDOCK	
207	2	SAFEDOCK	
207R	2	SAFEDOCK	
209L	2	SAFEDOCK	
209	2	SAFEDOCK	
211	2	SAFEDOCK	
213	2	SAFEDOCK	
213R	2	SAFEDOCK	
215	2	SAFEDOCK	
204	2	SAFEDOCK	
206	2	SAFEDOCK	
206L	2	SAFEDOCK	
208	2	SAFEDOCK	
210	2	SAFEDOCK	
210L	2	SAFEDOCK	
214L	2	SAFEDOCK	
214	2	SAFEDOCK	
212	2	SAFEDOCK	
301	2	SAFEDOCK	
302	2	SAFEDOCK	
303	2	SAFEDOCK	
304	2	SAFEDOCK	

304L	2	SAFEDOCK	
305	2	SAFEDOCK	
306	2	SAFEDOCK	
306L	2	SAFEDOCK	
307	2	SAFEDOCK	
308	2	SAFEDOCK	
308L	2	SAFEDOCK	
309	2	SAFEDOCK	
310	2	SAFEDOCK	

4.6 Types of Permitted Aerodrome Operations

Instrument and Visual flying operations of the following types:

- Air Transport passenger and cargo
- Training flights for normal air transport operations
- Positioning flights
- Commercial helicopter flights
- General aviation flights
- The largest aircraft type certified to use the airport is Airbus A380

Part D – Particulars of the Aerodrome required to be reported to the Aeronautical Information Service

Section 5 Aeronautical Information Service

5.1 Name and Address of Aerodrome

Manchester Airport
Wythenshawe
Manchester
M90 1QX

5.2 Insert Location of Aerodrome

Manchester Airport is located 7.5 NM SW of Manchester, United Kingdom.

5.3 Geographical Coordinates of the Aerodrome Reference Point

Latitude: 532113N
Longitude: 0021630W

5.4 Aerodrome Elevation and GEOID Undulation

Latitude & Longitude	532114N 0021630W
Elevation	257ft
Mid-point of Runway 05L/23R	
Geoid Undulation	167ft

5.5 Elevation of Thresholds and Runway Ends

5.5.1: a) Elevation of Each Threshold and Geoid Undulation

Elevation Threshold of Runway 05L	212ft
Elevation Threshold of Runway 23R	249ft
Elevation Threshold of Runway 05R	186ft
Elevation Threshold of Runway 23L	227ft

5.5.1: b) Elevation of the Runway Ends

Runway 05L end	249ft
Runway 23R end	200ft
Runway 05R end	235ft
Runway 23L end	186ft

5.5.1: c) Significant High and Low Points along the Runway

Runway 05l/23R has a high point, elevation of 257ft situated abeam Link Golf.

5.6 Aerodrome Reference Temperature

The Aerodrome Reference Temperature is 18C.

5.7 The Aerodrome Beacon

Aerodrome beacons are not used at Manchester Airport

5.8 Name of the Aerodrome Operator and Contact Details

Manchester Airport Group
Olympic House
Manchester Airport
Manchester
M90 1QX
Telephone No: 0161 489 3000

Section 6 Aerodrome Dimensions

6.1 Runways

6.1.1 True Bearing

Runway 05L/23R	51 03' 48" / 231 05' 10"
Runway 05R/23L	51 02' 46" / 231 04' 23"

6.1.2 Runway Designation

Runway designated numbers are 05L/23R and 05R/23L

6.1.3 Length and Width

Runway 05L/23R	3048m long and 45m wide, with 23m runway shoulders either side of the runway.
Runway 05R/23L	3200m long and 45m wide with 7.5m shoulders either side of the runway.

6.1.4 Displaced Threshold Locations

Runway 05L	532051.20N 0021715.95W Elevation 212ft Located 426m from runway start
Runway 23R	532140.74N 0021533.41W Elevation 249ft Located 183m from runway start
Runway 23L	532053.35N 0021637.95W Elevation 227ft Located 333m from runway start

6.1.5 Slope

Runway 05L/23R	Longitudinal slope overall 0.48%
Runway 05R/23L	Longitudinal slope overall 0.46%

6.1.6 Surface Type

Runway 05L/23R	Un-grooved asphalt (Betons Bitumineaux Aeronautiques)
Runway 05R/23L	Grooved Marshall asphalt

6.1.7 Type of Runway and Precision Approach Runway

Both runways are ICAO Code 4F runways with a compatible Obstacle Free Zone from a Precision Approach Runway.

6.2 Length, Width, Surface Types, and protected areas

6.2.1: a) Length, Width and Surface Type of Strips

A Runway Strip which encloses both runways is a code 4F instrument runway is provided in accordance with CAA CS ADR-DSN.B.150 to CS ADR-DSN.B.175 inclusive. Runway 23L has a 150 x 30m Starter Extension with a correspondingly reduced strip width of 96m.

6.2.1: b) Protected Areas

The Protected Area of the runway (or runway strip) is made up of the physical surface of the runway (including the shoulders), the Cleared and Graded area, Runway End Safety Areas plus any taxiways from the runway edge to the holding point.

6.2.1: c) Clear and Graded Area

The Cleared and Graded Area is that part of the Protected Area cleared of all obstacles except for minor specified items and graded, intended to reduce the risk of damage to an aircraft running off the runway. This is delineated on the airfield by a 'Burn Line'.

A Cleared and Graded Area (CGA) is provided for both runways which exceeds CAA requirements. The width of the area is 210m.

6.2.1: d) Runway End Safety Areas (RESAs)

Runway End Safety Areas are an area of the extended runway centreline adjacent to the end of the strip. They provide a cleared and graded area which is, as far as practicable, clear of all but frangible objects. This will reduce the risk of damage to an aeroplane undershooting or overrunning the runway.

RESAs are provided for both ends of both Runways. In all cases the length of RESA provided is at least 240m, which is the ICAO Recommended Practice.

Runway 05L	240m
Runway 23R	240m
Runway 05R	351m
Runway 23L	242m

All RESAs are 90m wide.

6.2.2 Stop-ways

No Stop-ways are provided.

6.2.3 Clearway Length and Ground Profile

Clearways are provided on all runway directions.

Runway 05L	215m
Runway 23R	300m
Runway 05R	300m
Runway 23L	300m

The ground profile beneath all Clearways is essentially flat.

6.2.4 Length, Width and Surface of Type of Taxiways

See Part C, Paragraphs 4.4.8 and 4.4.9 & 4.4.10

6.2.5 Apron Surface Type and Aircraft Stands

Aprons and aircraft stands are constructed of concrete. The table in Section 6.6.3 shows the location of each stand.

6.3 Visual Aids for Approach

6.3.1 Approach Lighting Type

Lighting at Manchester is provided to allow CAT IIIB operations on Runways 05L and 23R; CAT I on Runway 05R and a non-Precision approach on Runway 23L. Full details are provided in Part C, 4.4.4 .

6.3.2 Runway 05L/23R Provision

Both ends of Runway 05L/23R are equipped with a 900m high intensity Approach lighting in a 5 crossbar 'Calvert' arrangement, and the inner 300m with supplementary lighting consisting of white centreline barrettes and red side row barrettes. High Intensity Touch Down Zone lighting is provided in the first 900m after Threshold.

6.3.3 Runway 05R/23L Provision

Both ends of Runway 05L/23R are equipped with a 900m high intensity Approach lighting in a 5-bar 'Calvert' arrangement. There is no Touch Down Zone lighting.

6.3.4 Approach Slope Indicator

All runway directions are equipped with a 3° PAPI system is located to the left of the runway, except for Runway 05L, where the PAPI is to the Right of the runway.

6.3.5 Marking and Lighting of Runways

Both runways are equipped with inset white edge lighting which is bi-directional. The centreline is high intensity colour coded. Centreline light spacing is 15m on Runway 05L/23R and 30m on Runway 05R/23L.

There are full width green Threshold bars and full width red stop end bars, with the exception on Runway 05R which has red wing-bars at the stop end. Runway 23L has blue edge lighting along the 150m Starter Extension.

6.3.6 Marking and Lighting of Taxiways

Green centreline lighting is provided with blue edge lights on selected corners and intersections. Alternate amber and green centreline lighting is provided at runway turn-offs within the runway cleared and graded area together with blue edge lighting on corners.

Uni-directional stop-bars are provided at all Runway Holding Positions (RHP's) and bidirectional stop-bars are provided at all Intermediate Holding Positions used in RVR conditions of 800 m and below.

RHP stop-bars are in operation H24 to help to protect the runway against incursions. Runway guard lights are in use H24 at all RHPs.

A Ground Movement, Control and Monitoring System (GMCMS) is provided for guidance during Low Visibility Procedures. This system allows green taxiway centreline routing between runways and aprons with intermediate stop bars to allow block separation between taxiing aircraft.

6.3.7 Apron Lighting

Aprons are floodlit by high mast lighting towers and provide ambient light in accordance with CS ADR-DSN Chapter M.

6.3.8 Light Intensity Control

Runway and taxiways lighting has several intensity levels which may be selected by ATC. Default settings apply for various ambient weather conditions and times of day and night. Control of lighting intensity is explained in MATS Part 2.

6.3.9 Power Supplies for Aerodrome Ground Lighting

Primary power for airfield lighting is provided from the mains. Auto-start diesel fuel generators are provided in case there is a fault or failure with the primary supply. These generators supply the aerodrome lighting and Navaids. During Low Visibility Operations primary power is taken from the generators, with secondary supply from the mains.

6.3.10 Aerodrome Signal, Signs and Markings

6.3.10: a) Signals

A signal square is not provided. Coloured signalling lamps are available in the VCR for use in aircraft radio failure situations.

6.3.10: b) Taxi Guidance Signs

Information and Mandatory signs are provided in accordance with ICAO Annex 14.

6.3.10: c) Markings

Painted ground markings are provided in accordance with UK REG (EU) 139/2014 CS ADR-DSN Chapter L. Enhanced taxiway markings are used at the approaches to Runway Holding Points.

6.3.10: d) Road Signs and Markings

On aprons a double white line indicates the boundary of the manoeuvring area. Speed limits are reinforced by restriction signs painted on the roadway where necessary.

6.3.10: e) Wind Sleeves

Three illuminated wind sleeves are provided, one serving the 23R Threshold, one serving the Threshold of 05L and 23L, and another serving the Threshold of 05R.

6.3.10: f) Stands

Stand markings are surface painted, with a centreline and aircraft stopping position bars. Where a stand has a multiple-choice arrangement ('MARS') the subsidiary centrelines have a broken centreline marking. Boundaries between adjacent stands are indicated by Inter-Stand Clearway markings or stand clearance lines.

Parking/Docking Guidance is provided at contact stands by 'SafeDock' Advanced Visual Docking Guidance System (A-VDGS). At stands not equipped with A-VDGS system Aircraft parking is by marshallers instructions.

6.3.10: g) Aprons

Standard taxiways markings are provided on the apron stand taxi-lanes together with short-numbered arrows indicating the location and number of stands.

6.3.10: h) Taxiways

All taxiways have a painted centreline. At selected locations markings are provided alongside the centreline to indicate the designator of a particular taxiway or Intermediate Holding Point. These are also to provide directions to adjoining taxiways.

6.3.10: i) Runways

Runway markings are provided in compliance with the UK REG (EU) 139/2014 CS ADR-DSN Chapter L criteria for Precision Approach runways, including Runway 23L which has a Non-Precision Approach. These include runway edge markings, aiming points and touchdown zone markings.

6.4 NAVAIDS

Instrument Landing Systems (ILS) are provided for Runway 05L (CAT III), 05R (CAT I) and 23R (CAT III).

A VHF Omni-Directional Beacon with Distance Measuring Equipment (VOR/DME) is located on the south side of the aerodrome and is available for use as a non-Precision Approach aid, with published procedures. The 'ident' of this facility is 'MCT' on the frequency 113.55MHz.

6.4.1 Location and Radio Frequency of VOR Aerodrome Checkpoints

Not Applicable

6.5 Location and Designation of Standard Taxi Routes

Location and Designation of Standard Taxi Routes are illustrated on the plan shown in Part C, 4.4.8, 4.4.9, and 4.4.10 of this manual.

6.6 Geographical Coordinates

6.6.1 Threshold Runway Points

		WGS84 Coordinates		WGS84 Ht		Lit	OSGB36 Coordinates		Ht AMSL	
Description	**Identifier**	**Lat**	**Long**	**m**	**ft**	**Y/N**	**Easting**	**Northing**	**m**	**ft**
THR	05L	532051.20N	0021715.95W	115.56	379.14	N	380940.24	383443.88	64.57	211.84
THR	23R	532140.75N	0021533.41W	126.90	416.35	N	382841.91	384967.78	75.93	249.11
THR	05R	531955.10N	0021838.38W	107.78	353.60	N	379408.44	381716.83	56.77	186.25
THR	23L	532053.35N	0021637.95W	120.16	394.29	N	381643.30	383507.68	69.18	226.97

6.6.2 Taxiway Locations

Type	Identification	WGS-84 Coordinates		Lit	Elevation AMSL	
		Latitude	Longitude		(M)	(FT)
HOLD	A1	532047.7728N	0021736.1695W	N	59.292	194.528
HOLD	A2	532057.2916N	0021720.3062W	N	64.940	213.058
HOLD	A3	532106.9939N	0021701.5718W	N	66.109	216.893
HOLD	A4	532120.7559N	0021647.9899W	N	68.573	224.977
HOLD	AF1	532058.0123N	0021713.6527W	N	66.413	217.890
HOLD	AG1_E	532052.2344N	0021726.5773W	N	63.128	207.113
HOLD	AG1_W	532051.8768N	0021727.3394W	N	62.844	206.181
HOLD	B1	532107.7625N	0021655.0593W	N	67.512	221.496
HOLD	B2	532113.1201N	0021650.4848W	N	68.201	223.757
HOLD	B3	532122.4475N	0021635.3966W	N	69.797	228.993
HOLD	B4	532125.0146N	0021630.5089W	N	70.755	232.136
HOLD	B5	532127.5204N	0021625.3235W	N	71.885	235.843
HOLD	B6	532129.6142N	0021620.9491W	N	72.763	238.724
HOLD	BD	532108.2776N	0021653.8978W	N	67.488	221.417
HOLD	BZ1	532059.0513N	0021647.5226W	N	68.718	225.453
HOLD	C2	532125.1807N	0021638.8165W	N	69.665	228.560
HOLD	D1	532119.5641N	0021644.7567W	N	68.792	225.696
HOLD	D2	532128.2495N	0021643.2606W	N	69.504	228.031
HOLD	D3	532135.0765N	0021642.0836W	N	69.830	229.101
HOLD	DZ1	532113.0380N	0021618.9652W	N	74.114	243.156
HOLD	E3	532145.7867N	0021655.0215W	N	69.470	227.920
HOLD	E10	532155.3417N	0021712.5913W	N	66.473	218.087
HOLD	F1	532124.7893N	0021618.2495W	N	73.769	242.024
HOLD	F2	532127.4756N	0021621.8765W	N	72.447	237.687
HOLD	FZ1	532117.7719N	0021608.7812W	N	75.316	247.100
HOLD	G1	532134.0998N	0021606.3854W	N	75.162	246.594
HOLD	G2	532137.7426N	0021601.2778W	N	74.918	245.794
HOLD	G3	532140.0884N	0021555.3887W	N	74.432	244.199
HOLD	G4	532138.0445N	0021557.3302W	N	74.803	245.417
HOLD	H1_E	532133.1523N	0021601.5499W	N	76.320	250.394
HOLD	H1_W	532132.8562N	0021602.4712W	N	76.255	250.180
HOLD	H2	532135.6080N	0021602.8826W	N	75.291	247.018
HOLD	HZ1	532122.4672N	0021558.5031W	N	77.568	254.488
HOLD	J1	532145.5860N	0021536.1294W	N	74.44	244.23
HOLDE	J2	532144.1123N	0021542.8068W	N	74.74	245.21

HOLD	J3	532138.5786N	0021552.6577W	N	75.076	246.312
HOLD	J4	532130.8870N	0021609.3436W	N	75.533	247.812
HOLD	K1	532127.2286N	0021618.1828W	N	73.344	240.630
HOLD	K2	532125.0884N	0021622.6128W	N	72.298	237.198
HOLD	K3	532122.8010N	0021627.3453W	N	71.338	234.049
HOLD	K4	532120.4046N	0021632.3036W	N	70.439	231.099
HOLD	K5	532118.8660N	0021635.4883W	N	70.014	229.705
HOLD	L1	532130.8008N	0021635.4510W	N	70.678	231.883
HOLD	L2	532139.2189N	0021639.1430W	N	69.752	228.845
HOLD	M1	532140.8335N	0021545.0108W	N	74.735	245.194
HOLD	NA1	532159.0700N	0021715.2676W	N	65.790	215.846
HOLD	NC1	532146.0792N	0021650.4060W	N	69.247	227.188
HOLD	NC2	532151.8928N	0021646.2028W	N	68.908	226.076
HOLD	P1	532120.1300N	0021627.8882W	N	71.704	235.249
HOLD	P2	532122.8168N	0021631.5169W	N	70.451	231.138
HOLD	P3	532125.4676N	0021634.5407W	N	70.072	229.895
HOLD	P4	532129.7151N	0021639.3178W	N	70.114	230.033
HOLD	Q1	532136.2977N	0021645.4488W	N	68.778	225.65
HOLD	Q2	532138.4959N	0021649.1527W	N	68.814	225.768
HOLD	S1	532103.0999N	0021626.5943W	N	71.371	234.157
HOLD	T1	532104.9036N	0021621.1963W	N	72.141	236.683
HOLD	U1	532054.7418N	0021641.8663W	N	68.056	223.281
HOLD	U2	532056.2906N	0021643.7967W	N	68.492	224.711
HOLD	V1	532117.2762N	0021605.2162W	N	75.989	249.308
HOLD	V3	532112.2971N	0021615.5223W	N	74.766	245.295
HOLD	V4	532108.6322N	0021623.1060W	N	73.375	240.732
HOLD	V5	532105.4270N	0021629.7360W	N	71.952	236.063
HOLD	V6	532100.1375N	0021640.6849W	N	69.711	228.711
HOLD	V7	532056.7797N	0021647.6299W	N	68.594	225.046
HOLD	VA1	532101.1051N	0021629.3284W	N	70.612	231.667
HOLD	VA2	532103.3285N	0021630.3065W	N	71.273	233.835
HOLD	VB1	532057.6913N	0021636.3641W	N	69.548	228.176
HOLD	VB2	532059.8989N	0021636.9439W	N	69.718	228.734
HOLD	VC1	532050.8094N	0021653.0494W	N	66.636	218.622
HOLD	VC2	532052.7777N	0021651.7820W	N	66.918	219.547
HOLD	VD1	532044.7111N	0021705.6630W	N	63.702	208.996
HOLD	VD2	532046.6827N	0021704.3972W	N	64.474	211.529
HOLD	W1	532002.7984N	0021831.6407W	N	55.004	180.459
HOLD	Y1	531957.6433N	0021841.0068W	N	55.721	182.812
HOLD	Z1	532158.5118N	0021719.8532W	N	66.283	217.464
HOLD	Z2 BLUE	532159.2206N	0021722.7626W	N	66.407	217.87
HOLD	Z2 ORANGE	532200.2258N	0021721.1002W	N	66.117	216.919
HOLD	Z2 BLUE	532207.7303N	0021724.2722W	N	66.707	218.855
HOLD	Z3 ORANGE	532206.7370N	0021722.5957W	N	66.345	217.667

6.6.3 Aircraft Stands

	WGS84 Coordinates		OSGB36 Coordinates			
Stand	**Latitude**	**Longitude**	**Easting**	**Northing**	**Ht AMSL(m)**	**Ht AMSL(ft)**
1	532138.99N	0021626.70W	381856.73	384917.31	71.69	235.20
2	532138.77N	0021629.89W	381797.75	384910.54	71.00	232.94
4	532137.10N	0021629.72W	381800.61	384859.06	71.31	233.96
5	532136.78N	0021627.04W	381850.14	384849.02	71.73	235.34
6	532135.22N	0021629.54W	381803.77	384801.00	71.39	234.22
7	532135.40N	0021627.33W	381844.64	384806.25	71.72	235.30
8	532133.47N	0021630.04W	381794.18	384746.82	71.37	234.15
9	532133.77N	0021627.44W	381842.31	384755.96	71.71	235.27
10	532131.73N	0021630.16W	381791.89	384693.05	71.41	234.29
11	532132.25N	0021627.50W	381840.98	384708.96	71.77	235.47
12	532129.43N	0021629.41W	381805.40	384621.97	71.55	234.74
12L	532129.79N	0021630.64W	381782.76	384633.04	71.42	234.32
12R	532128.94N	0021629.23W	381808.76	384606.79	71.52	234.65
15	532130.38N	0021627.31W	381844.39	384651.08	71.86	235.76
16	532139.29N	0021622.99W	381925.33	384926.16	72.44	237.66
17	532139.53N	0021620.77W	381966.31	384933.36	72.83	238.94
18	532139.19N	0021617.87W	382019.87	384922.81	73.38	240.75
21	532140.76N	0021630.70W	381782.87	384972.14	70.70	231.96
22	532143.85N	0021634.46W	381713.76	385067.92	70.69	231.92
23	532142.12N	0021634.04W	381721.40	385014.53	70.67	231.86
24	532144.49N	0021637.14W	381664.36	385087.87	70.62	231.69
25	532142.48N	0021636.90W	381668.49	385025.81	70.64	231.76
26	532144.74N	0021639.99W	381611.71	385095.76	70.45	231.14
27	532142.83N	0021638.80W	381633.44	385036.81	70.65	231.79
28	532145.90N	0021642.40W	381567.29	385131.79	69.97	229.56
29	532143.67N	0021642.88W	381558.06	385062.82	70.05	229.82
31	532144.58N	0021644.84W	381522.05	385091.30	69.64	228.48
32	532145.73N	0021643.95W	381538.57	385126.60	69.71	228.71
41	532137.93N	0021616.22W	382050.20	384883.64	73.70	241.80
42	532136.08N	0021615.75W	382058.81	384826.34	73.63	241.57
43	532134.20N	0021615.73W	382058.94	384768.41	73.52	241.21
44	532133.03N	0021615.00W	382072.20	384732.11	73.67	241.70
44L	532133.04N	0021615.99W	382053.93	384732.43	73.45	240.98
44R	532132.23N	0021615.36W	382065.47	384707.40	73.64	241.60
47	532132.64N	0021613.78W	382094.83	384719.98	73.95	242.62
48	532133.42N	0021612.63W	382116.10	384744.04	73.99	242.75
49	532135.44N	0021612.59W	382116.99	384806.41	73.90	242.45
50	532136.79N	0021610.09W	382163.54	384847.88	73.92	242.52
51	532137.86N	0021608.54W	382192.30	384880.85	73.92	242.52
52	532138.71N	0021607.16W	382217.83	384907.22	73.90	242.45

53	532139.69N	0021605.57W	382247.36	384937.31	73.93	242.55
54	532140.80N	0021603.77W	382280.75	384971.35	73.93	242.55
55	532142.19N	0021601.15W	382329.37	385014.40	73.98	242.72
55L	532141.60N	0021601.18W	382328.65	384996.17	74.10	243.11
55R	532142.36N	0021559.30W	382363.56	385019.44	74.19	243.41
57	532143.13N	0021555.56W	382432.75	385042.79	74.32	243.83
58	532144.02N	0021553.71W	382467.07	385070.33	74.14	243.24
61	532133.60N	0021649.22W	381439.70	384752.19	69.44	227.82
61L	532132.45N	0021649.44W	381435.56	384716.71	69.46	227.89
61R	532134.77N	0021648.48W	381453.54	384788.39	69.18	226.97
62	532136.77N	0021648.20W	381458.94	384850.14	68.53	224.84
62L	532136.28N	0021646.83W	381484.14	384834.88	68.62	225.13
62R	532137.20N	0021647.21W	381477.27	384863.31	68.41	224.44
63	532137.91N	0021650.29W	381420.38	384885.49	68.96	226.25
63L	532137.55N	0021649.49W	381435.19	384874.18	68.70	225.39
63R	532138.52N	0021650.73W	381412.43	384904.40	69.17	226.94
64	532139.64N	0021653.14W	381368.01	384939.31	69.93	229.43
64L	532139.54N	0021651.90W	381390.79	384935.93	69.65	228.51
64R	532140.23N	0021653.61W	381359.38	384957.51	70.03	229.76
65	532141.31N	0021656.08W	381313.76	384991.09	70.45	231.14
66	532143.39N	0021659.64W	381248.28	385055.67	70.10	229.99
66L	532143.02N	0021658.70W	381265.56	385043.96	70.26	230.51
66R	532143.93N	0021700.31W	381235.98	385072.35	69.92	229.40
67	532145.34N	0021702.67W	381192.57	385115.85	69.42	227.76
67L	532144.98N	0021701.69W	381210.55	385104.85	69.60	228.35
67R	532145.80N	0021703.45W	381178.08	385130.34	69.27	227.26
68	532147.07N	0021706.03W	381130.56	385169.76	68.91	226.08
68L	532146.85N	0021704.84W	381152.62	385162.87	68.98	226.31
68R	532147.67N	0021706.60W	381120.10	385188.26	68.73	225.49
70	532150.94N	0021712.11W	381018.65	385289.69	67.72	222.18
71	532149.8335N	0021711.0638W	381037.89	385255.49	68.064	223.307
72	532150.9415N	0021712.9971	381002.29	385289.87	67.693	222.089
73	532152.0962N	0021714.6449W	380971.97	385325.67	67.324	220.878
74L	532153.0960N	0021716.3352W	380940.85	385356.7	67.011	219.853
74R	532154.0205N	0021718.5728W	380899.61	385385.43	66.844	219.305
74	532154.8603N	0021720.3922W	380866.08	385411.52	66.86	219.356
80	532149.85N	0021653.02W	381371.51	385254.69	68.72	225.46
80L	532150.16N	0021654.14W	381350.84	385264.35	68.55	224.90
80R	532149.16N	0021652.46W	381381.71	385233.27	68.87	225.95
81	532151.71N	0021655.92W	381318.08	385312.40	68.18	223.69
81L	532151.89N	0021657.07W	381296.87	385317.96	68.06	223.29
81R	532151.07N	0021655.68W	381322.36	385292.50	68.27	223.98
82	532154.06N	0021658.27W	381274.93	385385.17	67.84	222.57
82L	532153.70N	0021700.13W	381240.42	385374.30	67.69	222.08

82R	532152.76N	0021658.55W	381269.55	385345.01	67.90	222.77
101	532210.6628N	0021710.6593W	381047.95	385899.13	67.92	222.84
103	532209.6487N	0021712.3302W	381016.94	385867.92	67.61	221.83
104	532208.7783N	0021707.9361W	381098.04	385840.70	68.03	223.21
105	532208.6362N	0021714.0058W	380985.84	385836.75	67.32	220.86
106	532207.3209N	0021710.9715W	381041.76	385795.88	67.39	221.09
106R	532207.3932N	0021710.1958W	381056.11	385798.06	67.49	221.42
107	532207.6253N	0021715.6795W	380954.78	385805.64	67.02	219.87
108	532205.8690N	0021711.3086W	381035.35	385751.04	67.04	219.94
109	532206.6148N	0021717.3557W	380923.67	385774.54	66.07	218.83
110	532205.7046N	0021713.8513W	380988.33	385746.15	66.70	218.83
110L	532204.9777N	0021713.3615W	380997.30	385723.65	66.61	218.54
111	532205.6028N	0021719.0275W	380892.65	385743.39	66.41	217.87
112	532204.0181N	0021716.6435W	380936.52	385694.24	66.29	217.50
112R	532204.0575N	0021715.8125	380951.88	385695.40	66.30	217.2
113	532203.0930N	0021720.8072	380872.75	385665.91	65.82	215.94
113L	532204.4550N	0021720.4685	380865.87	385708.03	66.18	217.11
113R	532203.2244N	0021721.6644	380843.61	385670.09	65.83	215.97
114	532202.8521N	0021717.4587	380921.30	385658.27	65.94	216.33
116	532202.3586N	0021719.4522	380884.39	385643.17	65.73	215.63
116L	532201.8383N	0021719.3115	380886.93	385627.08	65.76	215.75
301	532201.8383N	0021719.3115W	380886.93	385627.08	65.76	215.75
302	532150.7082N	0021634.5922W	381712.16	385279.86	68.69	225.35
302L	532151.11N	0021636.03W	381685.71	385292.46	68.61	225.10
303	532152.37N	0021637.63W	381656.26	385331.45	68.34	224.21
304	532153.27N	0021638.50W	381640.28	385359.31	68.44	224.54
304L	532153.25N	0021639.74W	381617.26	385358.77	68.32	224.15
306	532155.36N	0021642.03W	381575.19	385424.22	68.41	224.44
306L	532155.27N	0021643.04W	381556.47	385421.43	68.31	224.11
307	532156.42N	0021644.86W	381523.03	385457.01	68.49	224.71
308	532157.46N	0021645.56W	381510.33	385489.44	68.40	224.41
308L	532157.40N	0021646.61W	381490.81	385487.37	68.28	224.02
231	532150.82N	0021651.40W	381401.42	385284.56	68.72	225.46
231L	532150.34N	0021650.49W	381418.28	385269.67	68.90	226.05
231R	532151.33N	0021652.19W	381386.89	385300.30	68.58	225.00
233	532152.54N	0021654.05W	381352.74	385338.01	68.23	223.85
235	532153.66N	0021655.92W	381318.24	385372.49	67.99	223.06
237	532154.82N	0021657.88W	381282.16	385408.59	67.74	222.24
901	532214.99N	0021717.84W	380915.76	386033.35	67.43	221.24
903	532213.98N	0021719.52W	380884.67	386002.25	67.26	220.66
905	532212.97N	0021721.19W	380853.58	385971.13	67.07	220.06
907	532211.96N	0021722.87W	380822.50	385940.04	66.90	219.47
909	532210.95N	0021724.54W	380791.41	385908.89	66.72	218.88
911	532209.93N	0021726.22W	380760.33	385877.78	66.52	218.25

913	532208.92N	0021727.89W	380729.23	385846.64	66.34	217.66
915	532207.73N	0021729.65W	380696.66	385809.87	66.12	216.94
917	532206.25N	0021730.65W	380677.94	385764.34	66.24	217.33
919	532204.91N	0021731.45W	380663.01	385722.99	66.54	218.32
925	532204.9125N	0021731.4472W	380663.01	385722.99	66.54	218.32
927	532157.8770N	0021726.0458W	380761.96	385505.17	66.91	219.53
929	532156.8737N	0021724.3577W	380793.04	385474.04	66.91	219.52

6.7 Obstacles Infringing Standard Protected Surfaces

For Geographical co-ordinates and Top Elevation of Significant Obstacles in the Approach, Take-off and Circling Aeras at the Aerodrome, refer to EGCC AD 2.10.

6.8 Pavement Surface Type & Bearing Strength Using Aircraft Classification Number

The Pavement Classification Rating (PCN) for runways, taxiways and aprons are given in Part C, section 4.4.8, 4.4.9 & 4.4.10

6.9 Pre-Flight Altimeter Check Locations Established and their Elevation.

This is not applicable to Manchester Airport

6.10 Runway and Runway Intersection Declared Distances

Runway and Runway Intersection Declared Distances are calculated in accordance with CAA CS-ADR-DSN. Details are illustrated in Part C, Section 4.4.6 & 4.4.7 of this manual.

Any temporary reduction in available declared distances are assessed by the Airfield Operations Duty Manager and at least one other competent person and are promulgated via NOTAM and ATIS.

6.11 Contact Details of Aerodrome Coordinator for Removal of Disabled Aircraft

The Aerodrome Coordinator for the removal of disabled aircraft at Manchester Airport is the Airfield Operations Duty Manager. The AODM can be contacted on 0161 489 3331. Procedures relating to disabled aircraft removal are contained at Part E, EGCC-I-AOPS-035 in this manual.

6.12 Rescue and Firefighting

6.12.1 Rescue and Firefighting Capability

Manchester Airport is equipped and resources its Rescue and Fire Fighting Service (MA RFFS) to meet the standard required for UK REG 139/2014 RFFS Category 10. MA RFFS availability will often exceed the minimum required standard for the RFFS category of Aircraft that use the Airport. This allows a degree of resilience in maintaining minimum required responses. It also allows MA RFFS to undertake certain domestic responses without compromising the Airfield Operating Status.

Manchester Airport will not permit aircraft movements to take place without the requisite level of fire cover being available at the time, including movements for which no category is required.

In the event of a total loss of fire cover, even temporarily, no aircraft movements will be permitted except for emergencies.

6.12.2 Compliance with Regulatory Requirements

The means whereby compliance is achieved is set out in the MA RFFS Task Resources Analysis and three other principal documents other than this Aerodrome Manual. These are the Manchester Airport Rescue and Firefighting Service Operational Guidance Documents, the Manchester Airport Emergency Response Manual, and the Manchester Airport Rescue and Firefighting Service Maintenance of Competence Manual. Where relevant, cross-references to the appropriate documents are given in the paragraphs below.

6.12.3 Manchester Airport RFFS Category 10

Manchester Airport RFFS have two Fire Stations located on the aerodrome. The Main Fire Station (North) is located abeam Taxiway Alpha with direct access onto the taxiway system and designated RFFS holding points for Runway 1 (05L – 23R). The second Fire Station (South) is located midway abeam Runway 2 (05R – 23L) with direct access on to the runway.

Both Fire Stations are staffed 24 hours a day and 365 days a year, in line with airport operations.

Any two major appliances can meet the 50% output requirement with remaining appliances arriving on scene exceeding the 100% requirement. To achieve response times in less than optimum surface conditions MA RFFS carries out low visibility training and sweep search procedures when operationally possible.

6.12.4 RFFS Personnel Structure

The fire station has 85 operational staff comprising of.

- 1 x Group Manager – Head of Fire Service
- 4 x Station Managers
- 8 x Watch Managers
- 20 x Crew Managers
- 52 x Fire-fighters

The level of duty watch staffing is determined by the Task Resource Analysis, TRA for current Category 10 Dual-runway operations.

6.12.5 On Duty MA RFFS Structure

The operational duty crews will comprise of a minimum of 16 operational staff including:

- 1 x Station Manager (Fire Chief)
- 2 x Watch Managers
- 5 x Crew Managers
- 8 x Fire-fighters

The level of staffing is achieved 24 hours a day by utilising a four-watch system. The day and night shifts consist of 12 hours, from 08.00hrs - 20:00hrs, and 20.00hrs – 08.00hrs.

Airport Fire Control (Command Support) is operated by a Fire Fighter forming part of the operational response. Fire Control (Command Support) is situated within the sub cab of the ATC control Tower.

Manchester Airport RFFS have a fleet of Oshkosh Striker 6x6 appliances. All Oshkosh Striker appliances have High Reach Extendable Turret appliances (HRET) equipped with both aspirating monitors; dual media spray branches and aircraft spiking piercing nozzles, ASPNs. All appliances have colour cameras and infrared thermal imaging capability.

6.12.6 Manchester Airport Fire Appliances on Immediate Response

	Fire 1	Fire 2	Fire 3	Fire 4	Fire 7	Fire 16	Fire Chief	
Type	**Oshkosh Striker**	**Oshkosh Striker**	**Oshkosh Striker**	**Oshkosh Striker**	**Domestic Pump**	**Rapid Response Vehicle**	**Command Vehicle**	**Total Media**
Crew	2	2	2	2	4	2	1	15
Water (Ltrs)	12,000	12,000	12,000	12,000	1800	None	None	49,800
Foam (Ltrs)	1,680	1,680	1,680	1,680	180	None	None	6,900
Monitor Throw	90m	90m	90m	90m	None	None	None	
Main Monitor discharge rate	6,000 Ltrs/pm	6,000 Ltrs/pm	6,000 Ltrs/pm	6,000 Ltrs/pm		None	None	24,000
Monnex Dry Powder	250 KGs	250 KGs	250 KGs	250 KGs	None	None	None	1000 KGs
Dry Powder discharge rate	7KGs/s	7KGs/s	7KGs/s	7KGs/s	None	None	None	

In addition, all appliances carry 5KG CO2 and 9KG Dry powder hand-held portable extinguishers.

6.12.7 Manchester Airport Fire Appliances Spare

	Fire 5	Fire 6	
Type	**Oshkosh Striker**	**Oshkosh Striker**	**Total**
Crew			4
Water (Ltrs)	12,000	12,000	24,000
Foam (Ltrs)	1,680	1,680	3,360
Monitor Throw	90m	90m	
Main Monitor discharge rate	6,000 Ltrs/pm	6,000 Ltrs/pm	
Monnex Dry Powder	250 KGs	250 KGs	500 KGs
Dry Powder discharge rate	7KGs/s	7KGs/s	

In addition, all appliances carry 5KG CO2 and 9KG Dry powder hand-held portable extinguishers.

Aerodrome RFFS CAT Requirement	Water	Foam Concentrate	Discharge Rate	Dry Powder
CAT 10	32,300Ltrs	3,876Ltrs	11,200Ltrs	450KGs
Manchester RFFS (4xstrikers)	48,000 (4xstrikers) Ltrs	6720 Ltrs	24,000 Ltrs	1000 KGs
Requirements exceeded	15,700 Ltrs	2844 Ltrs	12800 Ltrs	550 KGs

6.12.8 Safety Accountabilities

Details of responsibilities and succession are given in the Manchester Airport Rescue and Firefighting Service Operational Guidance Documents (SOG's).

6.12.9 Depletion of RFFS

The airport's capability for maintaining single or dual runway operations can be affected by depletion of the fire service. It should be noted that two spare fire appliances are available for resilience.

In the event of a depletion (Staffing levels) of I person, the fire service will initially maintain full category 10 cover by removing the Rapid Response Vehicle off the run and redeploying the crew members to the domestic response vehicle and Major Foam Appliance. If two members of staff are lost the Rapid Response Vehicle will be taken of the run and both vacant positions filled using the Rapid response Vehicle crew. At this point GMFRS will be informed "No Domestic Cover Available". If more than two crew members are lost MA RFFS will revert to single runway RFFS CAT 10 operations.

Beyond this, during any period of depletion, MA RFFS provision shall not be less than two categories below the size of aircraft expected to use the aerodrome. Guidance on levels of fire cover according to resources available during periods of depletion is in the MA RFFS Guidance Documents.

When depletion occurs, the Duty Station Manager must notify ATC and the Airfield Operations Duty Manager of the depletion and expected duration. The depletion in MA RFFS protection should be for the minimum duration possible with all efforts to restore the promulgated MA RFFS provision as a matter of urgency.

6.12.10 Category of cover provided.

MA RFFS provides continuous RFFS Category 10 cover Details of resources (media staff and vehicles) employed are given in the MA RFFS TRA.

MA RFFS provide continuous 24/7 RFFS Category 10 Dual Runway Operations. This provision is made up of the following vehicles:-

- One Fire Chief - Command Vehicle 4x4
- 4 x Major Foam Tenders (Oshkosh Strikers – HRET)
- 1 x Domestic Appliance
- 1 x Rapid Response Vehicle (RRV)

(Note: 1 x FF – Command Support)

Personnel for this dual runway response is 16.

A fully staffed permanent Command Support (Watch room) is always maintained by a firefighter provided.

6.12.11 Alerting Procedures

The primary method for alerting MA RFFS is a direct telephone from ATC, backed up by a crash alarm. Specific alerting procedures are given in the Manchester Airport Emergency Response Manual.

6.12.12 Alerting MA RFFS Personnel

The relevant sections of the MA RFFS Guidance Documents contain the procedures (SOG's) for alerting personnel across the full range of duties (i.e., training, extraneous duties, maintain response times etc).

6.12.13 Depletion of specialist equipment (Rescue Craft, Aerial Appliances etc)

MA RFFS are supported by Greater Manchester Fire & Rescue Service with an aerial ladder appliance for RFFS CAT 10 operations. This is contained within the LA Responding Service Section 16 agreement.

6.12.14 Reliance on other organisations to provide essential equipment.

A Memorandum of Understanding exists with Greater Manchester Fire and Rescue Service enabling MA RFFS to respond under Blue Light conditions, in accordance with the MOU, Section 15.

6.12.15 Competence of MA RFFS Personnel

MA RFFS employs a full-time Fire Service Training Manager and benefits from an on-site full-scale mock-up aircraft-training rig. Details of training policy are given in the MA RFFS Guidance Documents.

Specific instructions and requirements for training are given in the MA RFFS Maintenance of Competency Manual, relating to CAP 699

6.12.16 1000M undershoot & overshoot areas.

Four such areas exist at Manchester Airport. Procedures for access and operating in these areas are contained in the MA RFFS Guidance Documents (SOG's).

6.12.17 Difficult Environs

Areas such as the river Bollin and the large drainage lagoons alongside Runway 05R-23L have been identified as difficult environs for fire and rescue purposes. Procedures for access and operating in these areas are contained in the MA RFFS Guidance Documents (SOG's).

6.12.18 Domestic Fire Response

MA RFFS provides the necessary personnel and appliances to provide a Domestic Fire Response with minimal impact on the equipment and personnel required to maintain RFFS Category 10.

Once the Local Authority Fire Service attends any domestic incident, the Manchester airport RFFS will hand over to them at the earliest opportunity and return to their normal response duties. In the event of an aircraft incident during a domestic emergency, the Officer in Charge of the domestic incident will release crews to attend the incident as soon as possible as defined in the MA RFFS Guidance Documents (SOG's).

6.12.19 Landside Incidents

These are treated the same as for response to domestic incidents, procedures are included the MA RFFS Guidance Documents (SOG's).

6.12.20 Loss of Fire Cover

When MA RFFS is fully committed and therefore at 'No Fire Cover' (zero Category), no landings or take-offs will be permitted, no take-off clearances are to be issued, aircraft on final approach are to be instructed to go around and will be re-directed to a holding pattern or to a diversion airfield as required.

ATC will give the reason for withheld clearance as 'due to loss of/reduced Fire Service Category'. This restriction applies to ALL aircraft movements the sole exception being where the Aircraft Commander, of an inbound flight, has declared a 'PAN' or 'MAYDAY' and requests immediate landing at Manchester. The Commander will be advised of the Fire Category.

If the loss of fire cover is expected to be prolonged, outbound aircraft on the ground will be allocated stands and instructed to taxi to these stands by ATC, awaiting further developments.
Procedures for a reduction in Category are as follows:
The Station Manager or deputy is responsible for:

- Notifying ATC and the AODM of the loss and expected duration.
- Notifying the AODM when the loss terminates

The AODM is responsible for:

- Notifying temporary loss and resumption of normal services to the ATC Watch Manager.

6.12.21 Additional Water Supplies

Details of water supplies available to MA RFFS are detailed in the MA RFFS Guidance Documents (SOG's).

6.12.22 Low Visibility Procedures

Manchester Airport provides for full RFFS response in all weather conditions. Procedures to be adopted by MA RFFS during LVP are detailed in the MA RFFS Guidance Documents.

6.12.23 Training and Competence of First Aid personnel

MA RFFS employ an external training provider to provide the course content and training of instructors for the delivery of First Response training to all operational personnel.

6.12.24 Medical Equipment

MA RFFS carry medical equipment as required to supplement that provided by the local authority ambulance and medical response teams. These supplies are kept on the medical trailer and are detailed in the MA RFFS Guidance Documents (SOG's).

Part E – Aerodrome Operating Policies and Procedures

Section 7 Aerodrome Operational Policies

Ownership of the Aerodrome Operating Policies lies with the Head of Aerodrome Compliance. Implementation of any associated Airside Standing Instructions lies with the relevant departmental manager, as listed within the ASI.

Policy 1 Aircraft Engine Ground Running	**Further Reference: EGCC-I-AOPS-001**
Manchester Airport recognises that the ground running of aircraft engines for maintenance purposes is a necessary activity in the operation of the airport. However, this activity creates noise and jet blast, both of which, are potentially hazardous and disruptive to the surrounding community if not carefully controlled. The Airport will operate procedures to allow aircraft ground running to take place under the supervision of competent persons, at times and at locations which take due regard of the need to protect persons working at the airport from noise and jet blast hazard, and the local community from unreasonable and avoidable disturbance. Procedures will also be in accordance with the 'Section 106 agreement' with Cheshire County Council.	
Policy 2 Runway Inspection Regime & Movement Area Inspections	**Further Reference: LOP101,**
Runways Inspections of airfield facilities and infrastructure form a key part of the safety management system. In many cases inspections are required for legal and regulatory reasons and as a 'base line' the minimum requirements will be met. However, in view of the large and complex operation, Manchester Airport will in many cases exceed the minimum regulatory requirements. The inspection regime will aim to ensure that runways and associated infrastructure are safe for use by all types of aircraft using Manchester Airport. **Movement Area** Inspections of airfield facilities and infrastructure will form a key part of the Safety Management System. In many cases inspections are required for legal and regulatory reasons and as a 'base line' the minimum requirements will be met. However, in view of the large and complex operation, Manchester Airport will in many cases exceed the minimum regulatory requirements and will seek to introduce improved techniques for carrying out and recording inspections.	
Policy 3 Test, Training and Ferry Flights	**Further Reference: EGCC-I-AOPS-003**
Manchester Airport recognises that to conduct continued safe aircraft operations, it is necessary to undertake non-revenue flights for the purpose of crew training, aircraft and systems testing, or to reposition ('ferry') aircraft for operational reasons. Manchester Airport is not primarily a training and testing aerodrome, and the capacity for such activities is limited. However, the Airport will accommodate such flights with certain conditions.	
Policy 4 Aircraft Maintenance Activity	**Further Reference: EGCC-I-AOPS-004**
Manchester Airport will support the provision of aircraft maintenance activities. This includes heavy, major maintenance, and essential routine checks. Such activities do however, present risks to safety and the environment and therefore procedures will be in place to ensure that such activities can be managed safely,	

in accordance with environmental obligations, and balanced against the needs of other operational activities.

Policy 5 Airside Works (Development & Maintenance)	**Further Reference: EGCC-I-AOPS-005**

Manchester Airport will use the guidelines set out in CAP 791 (On Aerodrome Developments) as a basis for managing airside development & maintenance projects. The Head of Aerodrome Compliance, having responsibility for the safety assurance of airside development, will determine the strategy and the extent of operational safety management which will apply to each project in accordance with its scope.
Any proposed new airfield infrastructure will be carefully assessed for its operational feasibility and safety integrity at the concept stage. Only when the proposal meets regulatory requirements, and an acceptable level of safety will it proceed to detailed planning and implementation. Significant design changes will be assessed against these requirements.
Whether it be a new development or a maintenance project, airside works in progress will be managed such as to minimise the operational impacts but with a bias toward the highest levels of safety which may reasonably be expected. This will be achieved through a partnership approach with the contractor, through good design, risk assessment, a permit system, and active monitoring of safety performance. Manchester Airport will aim to be an industry leader and to demonstrate 'best practice' in the safety management of airside development work.

Policy 6 Access to the Critical Part (CP)	**Further Reference: EGCC-I-AOPS-006**

Access to operational areas is strictly controlled by legislation and additionally by local procedure to maintain security and safety of airport operations. As well as complying with statutory requirements, Manchester Airport will operate procedures to ensure that access to the aircraft movement area and various sub-areas within it are denied to all but those parties specifically requiring to do so in the course of their duties, and to ensure that such parties are adequately trained, briefed, and equipped to enter those areas safely.

Policy 7 Aerodrome Safeguarding	**Further Reference: EGCC-I-AOPS-007**

Aerodrome surveys are required to fulfil several statutory requirements. CAP 1732 sets out the required specification for Aerodrome topographical and obstacle limitations surveys. Manchester Airport will procure these under a contract with a CAA-approved provider. In addition to meeting the basic requirements of CAP 1732, Manchester Airport will use obstacle survey data, in combination with other information, to actively manage and control the obstacle risks and limitations to aircraft operations.

CURRENT SURVEY STATUS
As part of the Aerodrome Certification Process, the aerodrome and its surrounding environment must be surveyed to provide evidence of the physical characteristics and obstacle limitation surfaces.

A full Aerodrome Survey in accordance with CAP1732 is completed annually. Details are submitted to the CAA and held by the Head of Aerodrome Compliance .

An annual check survey will be carried out to monitor changes to the obstacle environment and to record and new or changed features on the airfield. Check surveys should be programmed to allow for the taking of any subsequent action to remove tree growth in good time before the bird-breeding season.
Copies of all survey information are held by the Head of Aerodrome Compliance and are available for inspection at any reasonable time.

Policy 8 Aircraft Noise	**Further Reference: EGCC-I-AOPS-008**

Manchester Airport has a stated objective to "…. limit, and reduce where possible, the number of people affected by noise because of the Airport's operation and development." To deliver this, there are several noise and track keeping restrictions in place.

Policy 9 Accident, Incident and Safety Occurrence Reporting	**Further Reference: EGCC-I-AOPS-009**
It is a legal requirement that all aircraft accidents and incidents are reported to the Civil Aviation Authority (CAA), the Air Accident Investigation Branch (AAIB) and the Health and Safety Executive (HSE) if deemed appropriate by the Head of Aerodrome Compliance, the, HAO, AODM, or ATC. Furthermore, prompt, and thorough investigations of accidents and occurrences may result in important lessons being learned, helping to avoid a re-occurrence. The following instructions relate to all the reporting systems used at Manchester Airport.	
Policy 10 Airside Defect Reporting	**Further Reference: EGCC-I-AOPS-010**
As part of Manchester Airport's Safety Management System, all airside users are encouraged to report defects relating to buildings, services, and facilities to the Asset Support Team (AST). Such reports are processed via the airport 'Enterprise Asset Management System' (EAMS) and disseminated to the relevant MAG Asset Management department or Sub-contractor for remedial action.	
Policy 11 Very Large Aircraft	**Further Reference: EGCC-I-AOPS-011**
Very Large Aircraft can be expected to operate at Manchester Airport on an increasingly frequent basis as the airport's business expands. These large types place correspondingly larger demands upon the airfield infrastructure. Manchester Airport will provide infrastructure and procedures to enable such aircraft to use the airport. However, for commercial and logistical reasons it will be necessary to limit the extent of such operations to certain parts of the airport site only.	
Policy 12 Baggage Hall Operations	**Further Reference: EGCC-I-AOPS-012**
Policy 13 Safety Infringements	**Further Reference: EGCC-I-AOPS-013**
Manchester Airport Airfield Operations is primarily responsible for maintaining safety and operational standards within the Airfield Boundary. The formation, implementation, and enforcement of safety policy on the apron, is vital for efficient operational procedures, to protect equipment and infrastructure, and to ensure the highest achievable levels of health and safety for all individuals. There are several procedures Manchester Airport considers the basis of a safe operation, such that any infringement is taken seriously, and that the event should be recorded on an Airfield Occurrence Report, some of which will involve financial penalties by way of a 'fine' being imposed against an offending company.	
Policy 14 Aeronautical Weather Information	**Further Reference: EGCC-I-AOPS-014**
Weather has a profound influence upon the safety and expediency of aircraft and airport operations. In addition to the various statutory requirements, Manchester Airport will ensure that accurate and timely weather information is available and promulgated, by the most appropriate means to airport users. The airport is principally dependent upon the services of the Meteorological Office for weather forecast information. However, wherever possible, use will be made of onsite data gathering systems and expertise to enhance this information for Manchester-specific application. This will particularly apply to real-time actual weather data. Manchester Airport is also committed to providing weather reporting systems to support safe aircraft operations in low visibility conditions, and to provide warning bulletins to airport users in the event of adverse weather conditions.	

Policy 15 Low Visibility Procedures	Further Reference: EGCC-I-AOPS-015
Manchester Airport is committed to providing facilities and procedures to enable the airport to remain open to operations during low visibility conditions. It must be accepted that such conditions will reduce air traffic capacity below that achievable in normal operations, however it is the intention, over time, to increase the low visibility capacity pro-rata, with increases in normal operating capacity. Manchester Airport will draw upon experience across the industry to continually review low visibility operations, with a view to enhancing safety and capacity.	
Policy 16 Thunderstorms	**Further Reference: Adverse Weather Plan**
Adverse weather such as strong winds, gales, and thunderstorms can be expected at reasonably frequent intervals. They have the potential to disrupt airport operations, and present risks to the safety of aircraft and people working airside. Manchester Airport will ensure that a system is in place for the timely receipt of weather warnings, and the subsequent dissemination of these by competent persons who have a procedure to follow, and actions to take. The potential effects of such weather conditions will also be taken into consideration when risks are assessed for developments on the airfield.	
Policy 17 Strong Winds	**Further Reference: Adverse Weather Plan**
When issued by the Met Office, Strong Wind Warnings are to be distributed to all airside users as per EGCC-I-AOP-017. Strong Wind Warnings will be continually monitors and any extensions or early cancellations will be distributed.	
Policy 18 Aircraft Pushback Procedures	**Further Reference: EGCC-I-AOPS-018**
Aircraft stands at Manchester Airport are predominantly of a Taxi-In-Push-Out layout, requiring the aircraft to be pushed out by a tractor or tug on departure. For this to happen safely a set of rules and procedures must be understood by all concerned and followed correctly. The adoption of a common procedure covering all apron stands has been agreed with the formation of the Pushback Working Group. This group consists of Ground Handling Agents / Engineering companies / NATS & MA. In the case of WIP on the apron which will interfere with the stand's pushback, NATS will issue a non-standard pushback.	
Policy 19 Fixed Electrical Ground Power	**Further Reference: EGCC-I-AOPS-019**
Fixed electrical ground power (FEGP) is provided at most aircraft stands for connection to aircraft during turnround and maintenance activities. FEGP is to be used as a preferred supply in accordance with environmental policy. Other sources of power such as mobile diesel generators or the on-board Auxiliary Power Unit should not be used unless the FEGP is unserviceable or incompatible with the aircraft type.	
Policy 20 Aviation Fuel Management	**Further Reference: EGCC-I-AOPS-020**
Responsibility for the management of the aviation fuel installation at Manchester Airport including (but not limited to) aviation fuel storage, distribution (both to the installation and from the installation to aircraft), quality and fitness of fuel for use in aircraft and the activity of fuelling to aircraft rests with the respective fuel suppliers as detailed in EGCC-I-AOPS- 20. As aerodrome certificate holder, MA will continue to monitor and audit the management, quality control and delivery procedures of the fuelling activities. Fuelling activities at Manchester Airport are undertaken by the fuel suppliers in accordance with Joint Inspection Guidelines (JIG), in conjunction with Explosive Atmospheres (ATEX) and Dangerous Substances Explosive Atmosphere Regulations (DSEAR). Guidance material published by the fuel industry Joint Inspection Group (JIG) is also applied.	

Policy 21 Spillages	Further Reference: EGCC-I-AOPS-021
Spillages of fuel, chemicals or toilet effluent can cause health and safety issues and have the potential to cause pollution of local watercourses. All companies should therefore ensure that such products are contained securely in appropriate and well-maintained tanks, bowsers and containers and to ensure that any spillage is promptly cleaned up or reported to MA for clean-up.	
Policy 22 Waste Disposal	**Further Reference: EGCC-I-AOPS-022**
All companies are responsible for identifying the waste generated from all parts of their business and ensuring that it is disposed of correctly. This includes identifying waste that is International Catering Waste or hazardous and requires specialist disposal. Additionally, waste should be segregated for recycling wherever possible.	
Policy 23 Aircraft Washing	**Further Reference: EGCC-I-AOPS-023**
Washing of airframes and aircraft engines will be permitted on the airport site, however because of the need to protect the environment from pollutants used in this activity, the locations, and the times when washing may take place will be restricted.	
Policy 24 Push & Park Procedure	**Further Reference: EGCC-I-AOPS-024**
To assist on-time departure and to vacate pier-served stands for arriving aircraft, procedures will be in place to allow departure-ready aircraft to be removed to a remote stand or airfield location whilst they await an ATC slot time. At Manchester this procedure is known as 'push and park' to nose out aircraft parking stand and as 'push and hold' for remote airfield holding.	
Policy 25 Aircraft Towing	**Further Reference: EGCC-I-AOPS-025**
It is the responsibility of Companies undertaking aircraft towing, to provide sufficient training to all operatives, thereby ensuring that they are competent to operate in the relevant airfield areas. A copy of the latest pushback procedures must be in the tug cab. It is the responsibility of the tug drivers to ensure that: •The tow vehicle, tow bar and associated equipment are serviceable for use and that towing is in accordance with the relevant agreed company procedures. •Whilst towing in confined areas or around aircraft or other obstacles, the tug driver is responsible for wing tip clearance, in accordance with Rule 42 of the Air Navigation Order. •When aircraft are to be moved during periods of bad visibility, or at night, the aircraft must be adequately illuminated at each extremity, i.e., navigation lights 'on' and the tractor/tug must display headlights and an anti-collision beacon. If anti-collision beacons unserviceable, the tug driver must call Airfield Control for assistance. •ATC permission must be obtained before all aircraft tows.	
Policy 26 Airbridge Operation	**Further Reference: EGCC-I-AOPS-026**
There are 3 types of Airbridge, which are the property of Manchester Airport. To ensure the safe arrival and departure of an aircraft Manchester Airport will only allow personnel to operate Airbridges who have successfully completed Airbridge training and validation by Manchester Airport Group authorised Handling Agent or Airline representative.	
Policy 27 Aircraft Turnround Management	**Further Reference: EGCC-I-AOPS-027**
Airport activity, and particularly the intense activities surrounding the turnround servicing of aircraft at apron stands, has the potential to be hazardous. It is during this activity that most accidents and incidents occur, resulting in injuries to personnel or passengers and in damage to aircraft and equipment. Notwithstanding various statutory requirements, the performance of persons and organisations working airside continues to have a profound effect on the level of operational safety at Manchester.	

Whilst Manchester Airport has certain responsibilities as the aerodrome certificate holder, it cannot take sole responsibility for apron activities - the airlines and their contractors must have in place their own arrangements for ensuring that safety is managed effectively, especially during the aircraft turnround process.
All persons whether passengers, visitors, or employees of any Airport Company must be protected from all airside hazards

Policy 28 Storage and Handling of Unit Load Devices (ULDs)	**Further Reference: EGCC-I-AOPS-028**

Airlines operating aircraft types with containerised holds at Manchester Airport require storage facilities for Unit Loading Devices. The Airfield Operations Manager, in consultation with Airlines and Ground Handling Agents, will agree the number of ULD's to be available on the appropriate racks. This will be accomplished by space taken on the racking by each ULD, to control the management of ULD's.

Manchester Airport has provided storage facilities for circa 600 units in several separate locations across the Airfield. These sites are allocated to specific Handling Agents based on their customer requirements and with consideration for the stands used by their contracted airlines.

Policy 29 Aircraft De-icing	**Further Reference: EGCC-I-AOPS-029**

During the winter months it will at times, be necessary for aircraft to undergo de-icing treatment before departure. This activity is safety-critical, requiring strict adherence to procedures.

Manchester Airport does not itself possess the equipment, materials, and expertise to carry out this function. It is a matter for aircraft operators to provide de-icing services, or to contract out with Ground Handling Agents. MA will provide, at a cost, areas for the storage of materials and equipment for use in airframe de-icing.

There is no suitable area on the airport at present for the provision of a centralised airframe de-icing. De-icing materials can be harmful to the environment and need to be managed carefully. MA operates a procedure, which ensures that de-icing materials are controlled and contained both in storage and in use, to prevent pollution of watercourses.

The Airfield Operations Duty Manager should be informed Daily of the fluid stock levels, equipment serviceability and staffing levels in accordance with the Manchester Airport Adverse Weather Plan.

Policy 30 Airside Competency & Training	**Further Reference: EGCC-I-AOPS-030**

Aprons and airside areas are hazardous workplaces and, to ensure safe working practices, Manchester Airport requires that all employers who employ workers airside ensure that their employees receive basic competence training that will provide the knowledge, skills and awareness to identify the hazards and to apply the relevant safety measures that are in place.

Policy 31 Airside Driving	**Further Reference: EGCC-I-AOPS-031**

Driving in airside areas presents many specific challenges requiring different knowledge and skills to those required for public roads. Furthermore, poor discipline and lack of competence by airside drivers has one of the greatest potentials for hazard to aircraft operations. Holding a UK driving licence or equivalent does not in itself make a person competent to oversee a vehicle in an airside area.

For these reasons Manchester Airport will require airside drivers to undergo specific training by a competent provider and to regularly refresh these skills. A permit system, code of conduct, and a disciplinary process will underpin the objective of ensuring safe airside driving. This will apply both to driving generally, and to

the specifics of operating individual types of vehicles. As well as meeting statutory requirements, procedures for obtaining a permit and operating a vehicle airside will follow the requirements to CAP790.

Policy 32 Airside Vehicle & Equipment Standards	**Further Reference: EGCC-I-AOPS-032**

All vehicles and trailed equipment operating airside at Manchester Airport must be maintained and inspected in accordance with CAA CAP 642 Airside Safety Management, DVSA Regulations and relevant HSE Regulations.

A maintenance system whilst important will not on its own ensure quality maintenance is obtained. Effective management of the operator's fleet by persons competent to do so will provide the best method of quality control.

A robust maintenance and safety inspection regime must be in place to ensure that vehicles/equipment do not endanger drivers, aircraft, persons or property and are fit for their intended purpose.

Policy 33 FOD & Airfield Sweeping	**Further Reference: EGCC-I-AOPS-033**

Foreign Object Debris (FOD) is any object, material or liquid that could cause damage to an aircraft. It represents one of the most serious - but avoidable - hazards to aircraft on the ground. Airport activity generates a great deal of waste material and debris. Examples of commonly found FOD include.

- Packaging and wrappings
- Wood, wire, screws, and nails
- Vehicle and equipment mechanical components
- Baggage components, such as strapping, wheels, padlocks, handles etc
- Newspapers, baggage labels, boarding cards
- Debris from aircraft cabin 'gash bags'
- Catering waste
- Construction materials
- Equipment and materials left by aircraft engineers
- Natural materials (plant fragments and wildlife)
- Runway and taxiway debris (concrete / asphalt, joint sealant)

If not properly controlled, this debris can end up on the movement area where it can present a significant risk to aircraft and airside workers. Hence, the importance of preventing the occurrence of FOD and removing any that does find its way onto the movement area should never be underestimated.

Policy 34 Detention of Aircraft	**Further Reference: EGCC-I-AOPS-034**

Where Airport Charges have not been paid to Manchester Airport Group (MAG), MAG may detain the aircraft in respect of which the charges are due, or any other aircraft operated by the person/company in default, by virtue of Section 88 of the Civil Aviation Act 1982.

This power may be exercised whether on the occasion when the charges have been incurred or at any time when the aircraft is on the aerodrome.

However, MAG shall not detain or continue to detain an aircraft for unpaid charges if the operator of the aircraft or any other person claiming an interest in the aircraft:

- Disputes that the charges, or any of them, are due or that the charges in question were incurred in respect of that; and
- Gives to MAG, pending determination of the dispute, sufficient security for payment of the charges that are alleged to be due.

In accordance with the provisions of Article 257 of the Air Navigation Order, specified Manchester Airport personnel are authorised by the UK Civil Aviation Authority (CAA) to detain aircraft for reason of safety, that is, if it is suspected an aircraft is intended to be flown in such circumstances as to be a danger or while in a condition unfit for flight.	
Policy 35 Recovery of Disabled Aircraft	**Further Reference: EGCC-I-AOPS-035**
Should an aircraft become disabled on a runway, taxiway, or other part of the Manoeuvring Area, the responsibility for the recovery of the aircraft lies with the owner / operator. It is recognised that many operators may not possess the specialist skills and resources to affect such a recovery, however, all airline operators at Manchester are expected to have aircraft recovery plans, and if necessary, appropriate contracts in place to cover the eventuality of an aircraft recovery at Manchester. Manchester Airport will provide on-site a degree of aircraft recovery capability, supplemented by arrangements with specialist contractors to provide heavy lifting support on standby.	
Policy 36 Storage of Bulk Liquids	**Further Reference: EGCC-I-AOPS-036**
All storage facilities for bulk liquids should be adequate to prevent any leakage that could be a health and safety hazard and/or cause pollution. In general, the standards set out in the Control of Pollution (Oil Storage) (England) Regulations 2001 should be adopted. Any vehicles and trailed equipment operating airside at Manchester Airport are also subject to EGCC-I-AOPS-032 Airside Vehicle & Equipment Standards.	
Policy 37 Wildlife Control & Habitat Management	**Further Reference: EGCC-M-AOPS-002**
Aerodromes attract birds and wildlife for a variety of reasons. The large open spaces of grassland and hard standing are ideal for many species as a source of food and afford clear views of potential predators. It is therefore essential that the landscape is managed in such a way that a wildlife-attractive habitat is discouraged. Furthermore, the environment in the surrounding locality has an influence on the type and level of wildlife activity in the vicinity of the aerodrome. The requirements to manage the bird hazard are set out in CAP 772. In complying with these requirements, Manchester Airport will ensure 24-hour active control of the bird hazard on the airfield, together with a longer-term, multi-agency approach to managing the off-airport bird hazard environment. Bird activity and bird strike data will be actively monitored as a key safety performance indicator. Effective Wildlife Control measures are an important aspect of Airfield Operations. Bird ingestion into aircraft engines and through cockpit glass has caused numerous major aircraft accidents involving loss of life, damage to property, disruption of airport activities and claims for damages against the airport and others. The identification of the local Bird Hazard, development of control procedures and detailed record keeping form the basis of an effective Wildlife Hazard Management Plan developed, reviewed, and implemented by Airfield Operations. The Wildlife Hazard Management Plan is published as a separate document and is available from the Airfield Operations Manager.	
Policy 38 Aeronautical Ground Lighting	**Further Reference:**
Aeronautical Ground Lighting (AGL) is a vital part of the airport's operational Infrastructure. It enables the continued safe operation of public transport flights at night and during adverse weather conditions. Manchester Airport is certificated to operate in weather conditions down to Category IIIB on Runway 23R / 05L. MA will provide, wherever possible and commercially viable, an AGL installation closely meeting the permanent specification. 'Ownership' of the AGL infrastructure, including control systems, will remain with	

MA, although aspects of design, installation and maintenance will be contracted. Design of systems will comply with CAP 670 and with any additional safety requirements identified during design hazard analysis.

Inspections procedure will comply with or exceed the regulatory requirements. Robust contingencies for the event of failures in the AGL system will be incorporated, to satisfy both the needs of operational safety and business continuity.

Policy 39 Reduced Runway Length Operations	**Further Reference:**

Operating with reduced runway distances can affect operational safety margins. Having the benefit of two main runways, Manchester Airport is better equipped to maintain a degree of business continuity in the event of a runway blockage than is a single-runway airport. For this reason, and the above consideration, re-declaration and continued use of a blocked runway will not normally be considered unless the anticipated time to clear the runway or strip is unduly lengthy.

The decision to operate a runway with re-declared distances will be taken jointly by the Accountable Manager, Head of Airfield Operations and to be approved by the competent authority.

Flight operations will not be permitted to continue in a manner requiring aircraft landing and taking-off to overfly active works on a closed section of runway.

When runway distances are reduced, all departing aircraft are to use the maximum TORA.

Policy 40 Contingency for Excess Traffic	**Further Reference: Aerodrome Excessive Traffic Plan**

Being a major international airport, Manchester Airport is an important diversion alternate for many airline operators. Manchester Airport welcomes this role and will seek, along with its service partners, to provide efficient operational support to flights diverting into Manchester, wherever possible.

At peak times however, the airport may be experiencing capacity shortfalls and priority must in these circumstances be given to Manchester-programmed flights. Flights requesting to divert into Manchester for a genuine emergency reason where the safety of the aircraft and those on board may be at risk will be given all due assistance.

The Excess Traffic Plan is published as a separate document and is available from the Head of Airfield Operations.

Policy 41 Runway Operational Modes	**Further Reference: UK AIP**

Legally binding planning conditions exist which restrict the operation of Runway 05R/23L between the hours of 22:00 and 06:00 local time. The following restrictions apply:

Dual Runway Operations:
Dual runway operations are not permitted between the hours of 22:00hrs and 06:00hrs local time.

Runway 05R/23L:
Runway 05R/23L must not be used between the hours of 22:00 and 06:00 local time, except in the event of an emergency (e.g. aircraft emergency or it is unsafe to use Runway 05L/23R) or during periods of planned maintenance. In such cases Runway 05R/23L will be used in single runway mode only. The airfield infrastructure is designed to accommodate single-runway use of 05R/23L, albeit with limited capacity.

Runway 05L/23R:
Runway 05L/23R may be used 24 hours each day.

Policy 42 Airside Audits	Further Reference:

The auditing of both Service Partners and Internal Departments forms one of the key components of Manchester Airports Safety Management System (SMS).

MA Airfield Safety and Compliance is responsible for undertaking Service Partner and Internal Department Audits, however, where specific expertise or independent verification is required then Airfield Operations will use the services of relevant industry experts to assist in conducting audits.

All audits will be carried out in confidence, the results of Service Partner or Internal Department audits will remain confidential to those companies or departments having been audited, the results of the audit including any non-compliance with agreed actions and time scales will be discussed at the audit out brief.

All reported non-compliances should be dealt with using the best endeavours of the company having been audited; any delay on agreed actions and time scales could however result in the audit being referred to the Operational Compliance Auditor.

All non-compliances resulting from Audit Reports will be included in the monthly Airfield Safety Management Report and subsequently discussed at the ASB.

Persistent non-compliances by individual Service Partners will be monitored by the Airfield Operations, Safety and Compliance audit team and brought to the attention of the Operational Compliance Auditor/Airfield Safety and Risk Manager.

Policy 43 Adverse Weather Plan	Further Reference: EGCC-M-AOPS-006

The arrangements for dealing with adverse winter weather (snow and ice as opposed to strong winds and thunderstorms) will be published annually in the form of a stand-alone document 'Adverse Weather Plan'. This plan will be published in the autumn of each year and will cover the forthcoming winter period, typically between November and April, although the plan remains valid throughout the year. The purpose of the Adverse Weather Plan is to establish a thorough response for maintaining safe aircraft operations during winter conditions of snow and ice. The Plan contains procedures, methods and responsibilities for all parties involved in the response at Manchester Airport.

The Adverse Weather Plan is available to view and download from the website http://www.manchesterairport.co.uk/ops

Policy 44 Aircraft Parking Stands & Allocation	Further Reference:

Manchester Airport retains full authority and control over the allocation of parking stands and the stand entry guidance provided to aircraft. Most aircraft parking stands at Manchester Airport are intended for use in the Taxi-In-Push-Out (TIPO) mode. Whilst airline operators' flights may be assigned to a specific terminal there are no stands dedicated to the operation of individual services except where security or border control requirements dictate otherwise. A system of stand allocation according to flight type will be agreed between MA Operations Director and the Airline Operators Committee and amended from time to time. This agreement covers service levels and customer expectations and may be overridden if required for reasons of aircraft safety.

Policy 45 Medical Services	Further Reference:

Northwest Ambulance Service (NWAS) respond to aircraft incidents at the airport and are also included in the Greater Manchester Response Plans as a Category 1 Responder.

NWAS also provide 24/7 medical cover at the airport through the Paramedic team based at the airport. The Paramedics respond to medical assistance calls from within the airport complex and medical emergencies on inbound aircraft. The Paramedics will not routinely become involved in a major aircraft emergency.

Manchester Airport Rescue and Fire Fighting Service (MA RFFS) also provide medical cover in liaison with the Paramedics.

Policy 46 Stand Closures & Restrictions	**Further Reference:**

The requirement to close or restrict an Aircraft Parking Stand will arise for several reasons, such as: -

- Major work in progress on or adjacent to a Stand
- Contamination of the apron surface (e.g. FOD or spillages)
- The presence of a temporary obstacle (e.g. equipment or vehicle)
- Airbridge maintenance (external maintenance or internal maintenance necessitating the movement or isolation of the airbridge)
- Routine stand maintenance (e.g. surface painting or degreasing)

Notwithstanding the requirement for internal Maintenance Teams, Contractors and Airfield Planning to consult the Airfield Liaison Manager when planning airside works, the Airfield Operations Duty Manager is accountable for the physical closure and operational reinstatement of Aircraft Parking Stand.

Policy 47 Emergency Response	**Further Reference:**

To uphold the continual safety and security of its passengers, customers and staff, Manchester Airport is committed to ensuring that effective emergency and contingency plans are in place. The Manchester Airport Emergency Response Manual describe the emergency plans in place at Manchester Airport with definitions of the emergency categories plus an indication of the roles and responsibilities of the key organisations involved in an emergency response.

Policy 48 Transportation of Live Animals	**Further Reference:**

The Airport Authority are not directly involved and do not have oversight in the activities related to the transportation of live animals, e.g. pets.

However, the Airport Authority expects Airlines and their Ground Handling Agents to fully comply with the IATA Live Animal Regulations (LAR)

Policy 49 Runway Friction Measurement	**Further Reference:**

Runway surface friction assessments are essential to ensure the safe operation of aircraft. To ensure that the runway surface friction level does not fall below an acceptable level, Manchester Airport will carry out friction assessments in accordance with the minimum standards set down in CAP 683 (The Assessment of Runway Friction for Maintenance Purposes) The frequency of friction assessments may be increased above the minimum levels set out in CAP683 for multiple, including.

- When results from previous assessments indicate that friction levels have reached Maintenance Planning Level
- To support the ongoing assessment of runway overrun risks
- To gauge the effectiveness of remedial works to the runway surface
- To build up a more comprehensive picture of friction trends

Following pilot reports of perceived poor braking action, if there are visible signs of runway surface wear, or for any other relevant reason.

Policy 50 Promulgation of Aerodrome Information	Further Reference:

Aeronautical data, providing accurate and timely information to pilots and aircraft operators, is important to the safe operation of Manchester Airport. The Airport will regularly review the data in the public domain, principally the UK AIP, to ensure that it is up to date and accurate. The Airport will work with providers of aeronautical information to improve both the quality of the data, its timeliness, and its presentation, bearing in mind that human factors can have a decisive effect on the effectiveness of published data.

SYSTEMS FOR PROMULGATION The primary external system for this is the UK Aeronautical Information Publication and its associated publications:

- AIP Supplements
- AIRAC System
- NOTAMS
- SNOWTAM
- ATIS

It is recognised that many airline operators use information derived from the UK AIP although supplied by other information providers such as Jeppesen, LIDO, and NavTech. Manchester Airport will audit the content of these publications and engage with the providers to assure accuracy.

Policy 51 MAN Exercise Policy and Programme	Further Reference: MAN Emergency Response Manual EGCC-M-AOPS-003

MAN ensures compliance with the exercising requirements as detailed in the UK retained regulations and CAA CAP1168. The Business Continuity & Resilience Manager is responsible for oversight of this exercise programme and is accountable to the Airport Control Director.
The purpose of an emergency exercise, as defined in ICAO Airport Services Manual Part 7, “is to ensure the adequacy of the following:

- Response of all personnel involved
- Emergency plans and procedures; and
- Emergency equipment and communications.”

MAN has a rolling programme of exercising in place which is outlined within page 40, Part A of the MAN Emergency Response Manual. Page 41, Part A of the MAN Emergency Response Manual references the MAN Exercise Policy.

Section 8 List of ASIs

Aerodrome Standing Instructions now sit externally to the aerodrome manual publication and can be found on the Aviation Professionals Website or Community App.

The below list is the current Airside Standing Instructions which are published.

ASI Reference	Document Title	Document Owner
EGCC-I-AOPS-001	Aircraft Engine Ground Running	Head of Airfield Operations
EGCC-I-AOPS-002	Electric Vehicle Charging at Stand 71	Head of Baggage and Engineering Operations
EGCC-I-AOPS-003	Test, Training and Ferry Flights	Head of Airfield Operations
EGCC-I-AOPS-004	Aircraft Maintenance Activity	Head of Airfield Operations
EGCC-I-AOPS-005	Airside Works (Development & Maintenance)	Head of Compliance
EGCC-I-AOPS-006	Access to Critical Part (CP)	Head of Airport Security
EGCC-I-AOPS-007	Aerodrome Safeguarding	Head of Compliance
EGCC-I-AOPS-008	Aircraft Noise	Head of Airfield Operations
EGCC-I-AOPS-009	Accident, Incident and Safety Occurrence Reporting	Head of Compliance
EGCC-I-AOPS-010	Airside Defect Reporting	Head of Airfield Operations
EGCC-I-AOPS-011	Very Large Aircraft	Head of Compliance
EGCC-I-AOPS-012	Baggage Hall Operations	Head of Airfield Operations
EGCC-I-AOPS-013	Safety Infringements	Head of Compliance
EGCC-I-AOPS-014	Aeronautical Weather Information	Head of Airfield Operations
EGCC-I-AOPS-015	Low Visibility Procedures	Head of Airfield Operations
EGCC-I-AOPS-016	BLANK	
EGCC-I-AOPS-017	BLANK	
EGCC-I-AOPS-018	Aircraft Pushback Procedures	Head of Airfield Operations
EGCC-I-AOPS-019	Fixed Electrical Ground Power	Head of Airfield Operations
EGCC-I-AOPS-020	Aviation Fuel Management	Head of Airfield Operations
EGCC-I-AOPS-021	Spillages	Head of Airfield Operations
EGCC-I-AOPS-022	Waste Disposal	Head of Airfield Operations
EGCC-I-AOPS-023	Aircraft Washing	Head of Airfield Operations
EGCC-I-AOPS-024	Push & Park Procedures	Head of Airfield Operations
EGCC-I-AOPS-025	Aircraft Towing	Head of Airfield Operations
EGCC-I-AOPS-026	Airbridge Operation	Head of Airfield Operations
EGCC-I-AOPS-027	Aircraft Turnaround Management	Head of Airfield Operations

EGCC-I-AOPS-028	Storage and Handling of Unit Load Devices (ULDs)	Head of Airfield Operations
EGCC-I-AOPS-029	Aircraft De-Icing	Head of Airfield Operations
EGCC-I-AOPS-030	Airside Competency & Training	Head of Airfield Operations
EGCC-I-AOPS-031	Airside Driving	Head of Airfield Operations
EGCC-I-AOPS-032	Airside Vehicle & Equipment Standards	Head of Aerodrome Compliance
EGCC-I-AOPS-033	FOD & Airfield Sweeping	Head of Airfield Operations
EGCC-I-AOPS-034	Detention of Aircraft	Head of Airfield Operations
EGCC-I-AOPS-035	Removal of Disabled Aircraft	Head of Airfield Operations
EGCC-I-AOPS-036	Minimum Standards for Bowsers, Tankers, Tanks & Chemicals	Head of Compliance
EGCC-I-AOPS-037	Manchester Airport Diversion Policy	Head of Airfield Operations